IMP. BUR.
26 MAY. 1926
ENTOM.

IMP. INST. ENTOM.
— LIBRARY —
No. 2247

THE

ZOOLOGICAL RECORD

VOLUME THE SIXTY-FIRST

BEING

RECORDS OF ZOOLOGICAL LITERATURE

RELATING CHIEFLY TO THE YEAR

1924

COMPILED FOR THE ZOOLOGICAL SOCIETY OF LONDON WITH ASSISTANCE FROM SOME REGIONAL BUREAUS OF THE INTERNATIONAL CATALOGUE, BY

J. R. NORMAN, H. B. PRESTON, MISS JOAN B. PROCTER, W. L. SCLATER, A. K. TOTTON, MISS H. M. MUIR WOOD, H. M. WOODCOCK AND THE IMPERIAL BUREAU OF ENTOMOLOGY.

SUPERINTENDED BY

W. L. SCLATER, M.A., F.Z.S.

Explorate solum: sic fit via certior ultrà.

LONDON:
PRINTED FOR THE ZOOLOGICAL SOCIETY;
SOLD AT THEIR HOUSE IN REGENT'S PARK.
MCMXXV.

Papers and Memoirs intended for this work should be addressed to "THE EDITOR of the Zoological Record, Zoological Society, Regent's Park, London, N.W. 8." It is earnestly requested that in the case of separately-printed copies of papers so forwarded, the *original pagination* may be indicated.

Harrison & Sons, Ltd., Printers in Ordinary to His Majesty, St. Martin's Lane, W.C. 2.

PREFACE.

IT is very satisfactory to announce the publication of the Sixty-first Volume of the Record, containing the literature of Zoology for the year 1924, before the close of the year 1925, and it is only by the cheerful cooperation of the Recorders and Printers that it has been accomplished. We shall hope in future that the volume for each year will be issued before the close of the succeeding one.

There are no changes this year in the ranks of the Recorders and we have again to thank Dr. F. A. Bather, Dr. W. T. Calman, Mr. A. S. Hirst and Mr. Oldfield Thomas for reading the proofs of the several portions of the Record with which they are familiar.

The full list of abbreviations and titles of Journals has this year again been omitted and only a supplementary list printed. It is hoped that by next year the second volume of the World-list of Scientific Periodicals containing the abbreviated forms of the titles will be issued and this will then form the basis for a new list of Zoological Periodicals.

The outlook for the Zoological Record is slightly better, and if the societies, institutions and individuals who gave a promised financial support, continue to assist, it seems likely that the annual loss will not exceed the £500 which, for the present, the Zoological Society is prepared to meet. In addition to the list of promises and donations to Volume 60, printed in the Introduction to Volume 60, the Linnean Society of New South Wales sent a donation of £10 and the Royal Canadian Institute a donation of £5 2s. 5d. These, with adjustments in respect of foreign cheques, but including the Zoological Society's own subscription of £500, made the donation fund in respect of Volume 60 amount to £1,121 5s. 9d. to which has to be added £347 0s. 3d. brought forward from Volume 59.

Fund available for Volume 60—	£	s.	d.
Donation Fund and Surplus as above ...	1,468	6	0
Subscriptions to Vol. 60 to Oct. 31, 1925...	520	11	2
Sales " " " ...	281	0	11
Late Subscriptions to Vol. 59	10	0	0
Sales of Vol. 59 since last adjustment ...	35	15	8
	2,315	13	9

Cost of Volume 60 (exclusive of Office expenses)—	£	s.	d.	£	s.	d.
Printing	920	16	7			
Editor	200	0	0			
Recorders	345	0	0			
Assistance in compilation ...	45	14	6			
Carriage &c.	14	19	4			
				1,526	10	5
Surplus				£789	3	4

It must be noted, however, that this Surplus includes a total of £312 4s. 6d. promised but not yet paid.

Volume 61.

The following donations have been received—	£	s.	d.
Liverpool School of Tropical Medicine ...	5	5	0
Dr. T. D. A. Cockerell	3	0	0
British Ornithologists' Union	11	5	0
Dr. Samuel Henshaw	10	0	0
	£29	10	0

The following have been promised—	£	s.	d.
British Ornithologists' Club	11	5	0
Conchological Society	2	2	0
British Marine Biological Association	5	5	0
South Africa Biological Society...	5	5	0
Geological Society	15	0	0
Dr. A. G. Hornyold	5	0	0
Hawaiian Entomological Society	5	5	0
	£49	2	0

The following have guaranteed donations—	£	s.	d.
Wellcome Bureau of Scientific Research, up to	15	0	0
Entomological Society ... ... "	50	0	0
Challenger Society ... ... "	5	5	0
Linnean Society ... ... "	25	0	0
Association of Economic Biologists ... of	5	0	0
Quekett Microscopical Club ... ... "	5	5	0
	£105	10	0

By agreement with the Zoological Society, the Imperial Bureau of Entomology, which has undertaken the editing and compilation of the Part XI Insecta, will also, in future, be responsible for the sale of this Part and of sub-divisions of it.

P. CHALMERS MITCHELL, *Secretary*,
Zoological Society.

W. L. SCLATER, *Editor*,
Zoological Record.

November, 1925.

EXPLANATORY.

This Volume is printed in the Divisions enumerated on p. vi.

The pagination of each Division is separate, and is given at the left-hand top corner of the pages. The number and name of the Division is given as a heading on each page. The date 1924 corresponding to the bulk of the literature indexed is given at the top of each page.

In the Subject Index of each Division authors are quoted by name only. The full references will be found in the Title Section of the Division.

The Literature indexed is mainly that of 1924 but includes entries for earlier years that have been received too late for inclusion in previous volumes.

ERRATA IN ZOOLOGICAL RECORD, VOL. LX FOR 1923—

VIII.—Mollusca. Page 57, left-hand col., line 29.
Insert **Kennard** & **Woodward** after *Terveria*.

X.—Arachnida. Page 12, left-hand col., line 11.
For Tribolita read **Trilobita**.

XIV.—Reptilia. Page 37, left-hand col., line 29.
For Inostranzeira read Inostranzevia.

Names of New Genera. Page 7, left-hand col., line 4.
For Inostranzeira read Inostranzevia

ERRATUM FOR ZOOLOGICAL RECORD, VOL. LXI FOR 1924—

XI.—Insecta. Page 214, line 20.
Delete paragraph beginning "*Heringia* **n.n.**"

CONTENTS.

I. COMPREHENSIVE ZOOLOGY.

II. PROTOZOA.

III. PORIFERA OR SPONGIAE.

IV. COELENTERATA.

V. ECHINODERMATA.

VI. VERMES: including GEPHYREA AND PTEROBRANCHIATA.

VII. BRACHIOPODA AND BRYOZOA OR POLYZOA.

VIII. MOLLUSCA.

IX. CRUSTACEA.

X. ARACHNIDA AND MYRIOPODA; including GIGANTOSTRACA, EURYPTERIDA AND PROTOTRACHEATA.

XI. INSECTA.

XII. PROCHORDATA: including TUNICATA, CEPHALOCHORDATA AND ENTEROPNEUSTA.

XIII. PISCES.

XIV. REPTILIA AND BATRACHIA.

XV. AVES.

XVI. MAMMALIA.

LIST OF THE NAMES OF NEW GENERA AND SUBGENERA.

SECOND SUPPLEMENTARY LIST OF ABBREVIATIONS WITH TITLES OF JOURNALS.

I. COMPREHENSIVE ZOOLOGY

ARRANGED BY

W. L. SCLATER.

This section includes works that deal with more than one branch of Zoology, or that are of general interest to Zoologists. It is, therefore, not complete in itself as regards any one subject included in it. The special records complete each subject. A few memoirs included in the special records are repeated in this division.

CONTENTS

	PAGE
I. Titles	2
II. Subject-Index	16

I.—TITLES.

1.—Abderhalden, G. Handbuch der biologischer Arbeitsmethoden. Lief. 144. **Collier,** W. A. Allgemeine Methoden des zoologischsystenatischen Arbeitens; die Nomenklatur. Pp. 585–676 Berlin (Urban) 1924 8vo.

2.—Abel, O. and others. Neue Studien über Krankheiten fossiler Wirbeltiere. Verh. Zool.-Bot. Ges. Wien **73** 1924 pp. (98)–(107) (165)–(174).

3.—Adamstone, F. B. The bottom fauna of Lake Nipigon. Univ. Toronto Stud. Biol. Ser. no. **19** 1923 pp. 45–70.

Adelmann, H. B. *vide* Kingsbury.

4.—Allen, E. and others. The hormone of the ovarian follicle; its localization and action in test animals, and additional points bearing upon the internal secretion of the ovary. J. Anat. Philadelphia **34** 1924 pp. 133–181 7 pls.

5.—Alsterberg, G. Die Nahrungszirkulation einiger Binnenseetypen. Arch. Hydrob. Stüttgart **15** 1924 pp. 91–338 3 figs.

6.—Altmann, F. Untersuchungen über die Torsio femoris und damit im Zusammenhang stahende Fragen. Zs. ges. Anat. München Abt. 1 **75** pp. 82–126 27 figs.

7.—Alverdes, F. Ueber reflexe Instinkt- und Verstandestatigkeiten. Zool. Anz. Leipzig **60** 1924 pp. 293–302.

8.—Ancel, P. et **Vintemberger,** P. Le sensibilité d'une cellule aux rayons x est elle plus grande au cours de la mitose que pendant le repos? C.R. Soc. Biol. Paris **91** 1924 pp. 1271–1273. See also pp. 1425–1428.

9.—André, E. Appareil pour la prise d'echantillons de limons lacustres. Rev. Hydrob. Aarau **2** 1922 pp. 188–192 2 figs.

10.—André, E. Contribution à l'étude de la faune du Léman. Rev. Hydrob. Aarau **2** 1922 pp. 193–196.

11.—Anon. Studia Mendeliana: ad centesimum diem natalem Gregorii Mendelelii a grata patria celebrandum. Adiuvante ministerio Pragensi edita. Pp. 415 Brunae [Brünn] (apud typos) 1923.

12.—Anon. Obituary.—Nelson Annandale. J. Bombay N. H. Soc. **30** 1924 pp. 213–214.

13.—Anson, M. L. and others. On the corrrelation between the spectra of various haemoglobins and their relative affinities for oxygen and carbon monoxide. Proc. R. Soc. London **B 97** 1924 pp. 61–83.

14.—Artom, C. Le cellule germinative studiate nella loro tendenza a determinare il sesso. Riv. Biol. Roma **6** 1924 pp. 440–457.

15.—Ashworth, J. H. Modern Zoology: some of its developments and its bearings on human welfare. Rep. Brit. Assoc. London **91** 1924 pp. 108–125.

16.—Baesflins-Jessen, J. Some remarks on the principles of in-breeding. Hereditas Lund **5** 1924 pp. 231–240.

17.—Baldwin, F. M. Comparative rates of oxygen consumption in marine forms. Proc. Iowa Acad. Sci. Des Moines **30** [1924] pp. 173–180.

18.—Barta, E. Experimental histological studies. I.—Some factors regulating the morphology of tissue (ureter in vitro). Anat. Rec. Philadelphia **29** 1924 pp. 33–56 10 figs.

19.—Bateson, W. Progress in Biology. Nature London **113** 1924 pp. 644–646, 681–682.

20.—Bather, F. A. The meaning of the terms "Binary" and "Binominal" as applied to Biological Nomenclature. J. Linn. Soc. Zool. London **36** 1924 pp. 29–35.

Bauer, E. *vide* Růžička.

21.—Bauer, V. L'ecologia lacustre ed il nuovo concetto dell'idrobiologia. Riv. Biol. Roma **5** 1923 pp. 347–357.

22.—**Bayersdoerfer, F.** Beiträge zur Frage der Horizontalverbreitung des Zooplanktons in Bodensee. Intern. Rev. Hydrobiol. Leipzig **12** 1924 pp. 60–89.

23.—**Becher, S.** Johann Wilhelm Spengel ‡. Zool. Jahrb. Jena Abt. Anat. **46** 1924 pp. 1–74 portr.

24.—**Beer, G. R. de.** Growth. Pp. viii + 120 8 pls. 33 text-figs. London (Arnold) 1924 8vo.

25.—**Beer, G. R. de.** The evolution of the Pituitary. Brit. J. Exper. Biol. Edinburgh **1** 1924 pp. 271–291 11 figs.

26.—**Benninghoff, A.** Zur Kenntnis und Bedeutung der Amitose und amitosenähnlicher Vorgänge. Sitzb. Ges. Naturw. Marburg for **1922** 1923 pp. 45–68.

27.—**Benninghoff, A.** Experimentelle Untersuchungen über den Einfluss verschiedenartiger mechanischer Beanspruchung auf den Knorpel. Verh. Anat. Ges. in Anat. Anz. Jena **58** 1924 pp. 194–214 6 figs.

28.—**Berg, L. S.** La distribution bipolaire des organisms et l'epoque glacaire. Bul. Acad. Sci. Russ. Petrograd (6) **14** 1920 pp. 273–302 [in Russian].

Bergauer, V. *vide* Růžička.

29.—**Bétancés, L. M.** La cellule primitive du sang. C.R. Acad. Sci. Paris **178** 1924 pp. 337–339.

30.—**Bétancés, L. M.** L'origine de fibrilles réticulaires. C.R. Acad. Sci. Paris **178** 1924 pp. 527–528.

31.—**Bétancés, L. M.** Nouvelles précisions sur la cytohématogenèse. C.R. Acad. Sci. Paris **179** 1924 pp. 925–927.

32.—**Bishop, S. C.** and **Clarke, N. T.** A scientific survey of Turner's Lake Isle-au-Haut, Maine. 1922. New York State Mus. Bul. Albany no. **251** 1924 appendix pp. 1–29 map pls. figs.

33.—**Böker, H.** Elastische Federungen in den Extremitäten der Wirbeltiere. Zs. Morph. Stuttgart **23** 1923 pp. 1–32 15 figs.

34.—**Bokor, E.** Beiträge zur rezenten Fauna der Abaligeter Grotte. Zool. Anz. Leipzig **61** 1924 pp. 111–121.

35.—**Borcea, L.** Faune survivante de type caspien dans les limans d'eau douce de Roumanie. Ann. Sci. Univ. Jassy **13** 1924 pp. 207–232 8 figs.

36.—**Börner, C.** Zur Theorie der Geschlechtsvererbung. Eine Arbeitshypothese. Abh. Natw. Ver. Bremen **25** 1924 pp. 482–514 6 figs.

37.—**Bonygues, H.** Contribution a l'étude comparative du chondriome des cellules animales et végétales. Act. soc. linn. Bordeaux **76** 1924 pp. 2–166 35 figs.

38.—**Bowen, R. H.** On a possible relation between the Golgi apparatus and secretory products. Amer. J. Anat. Philadelphia **33** 1924 pp. 197–217 14 figs

39.—**Bowen, R. H.** On the acrosome of the animal sperm. Anat. Rec. Philadelphia **28** 1924 pp. 1–13 2 figs.

40.—**Bowen, R. H.** Studies in Insect Spermatogenesis. VI.—Notes on the formation of the sperm in Coleoptera and Aptera, with a general discussion of flagellate sperms. J. Morph. Philadelphia **39** 1924 pp. 351–413 4 pls. 2 text-figs.

41.—**Bower, F. O.** The present outlook on Descent. Nature London **113** 1924 pp. 356–358.

42.—**Boyson, V. F.** The Falkland Islands with notes on the Natural History by Rupert **Vallentin.** Pp. xvi + 414 maps and many illustr. Oxford (Clarendon Press) 1924 8vo.

Brachet, A. *vide* Duesberg.

43.—**Brambell, F. W. R.** and **Gatenby, J. B.** The supposed homology of the golgi elements of the Mammalian nerve cell, and the nebenkern batonettes of the genetal cells of invertebrates. Sci. Proc. R. Dublin Soc. **17** 1924 pp. 275–280 1 pl.

44.—**Bremer, J. L.** On the variations of wall thickness in embryonic arteries. Anat. Rec. Philadelphia **27** 1924 pp. 1–13 6 figs.

45.—**Brues, C. T.** Observations on animal life in the thermal waters of Yellowstone Park, with a consideration of the thermal environment. Proc. Amer. Acad. Arts Sci. Boston **59** 1924 pp. 369–438 5 figs.

46.—Bruce, J. R. A pH. method for determining the carbon dioxide exchanges of marine, brackish water and freshwater organisms. Brit. J. Exper. Biol. Edinburgh **2** 1924 pp. 57–64.

47.—Bruni, A. C. Sincizi ed individualità cellulare nei processi istogenetici. Natura Milano **15** 1924 pp. 170–180 4 figs.

48.—Buchner, P. System und Symbiose. Verh. D. Zool. Ges. Berlin **29** 1924 pp. 48–54.

49.—Buddenbrock, W. von. Untersuchungen über den Mechanismus der phototropen Bewegungen. Wissen. Meeresunters. Kiel Abt. Helgoland **15** 1923 no. 5 pp. 1–19 10 figs.

50.—Busacca, A. Sulla struttura della fibra cristalline vivente. Atti R. Acc. Naz. Linc. Roma (5) **33** 1e Ser. 1924 pp. 415–419.

51.—Buxton, P. A. Heat, moisture, and animal life in deserts. Proc. R. Soc. London **B96** 1924 pp. 123–131.

52.—Cajal, S. R. Una modificacion del método de Bielschowsky para la impregnación de la neuroglia común y mesoglia y algunas consejos acerca de la técnica del oro-sublimado. Trab. Labor. Invest. Biol. Univ. Madrid **18** 1920 pp. 129–141.

53.—Cajal, S. R. Una formula de impregnación argéntica especialmente aplicable a los cortes del cerebebelo, y algunas consideraciones sobre la theoria de Liesegang, acerca del principio del método del nitrato de plata reducido. Trab. Labor. Invest. Biol. Univ. Madrid **19** 1922 pp. 71–87.

54.—Capra, F. Sulla fauna della Grotta del Pugnetto in Val di Lanzo. Att. Acc. sci. Torino **59** 1924 pp. 153–161.

55.—Carlson, A. J. A note on the action of curare, atropine, and nicotine on the Invertebrate heart. J. Gen. Physiol. New York **4** 1922 pp. 559–568.

56.—Carpenter, K. E. A study of the fauna of rivers polluted by lead mining in the Aberystwyth district of Cardiganshire. Ann. Applied Biol. Cambridge **11** 1924 pp. 1–23 2 maps.

57.—Castle, W. E. Does the inheritance of differences in general size depend upon general or special size factors. Proc. Nat. Acad. Sci. Washington **10** 1924 pp. 19–22; see also pp. 181–182 and K. **Sax** pp. 224–227.

57.—Chamberlin, J. C. Concerning the hollow curve of distribution. Amer. Nat. New York **58** 1924 pp. 350–374.

59.—Champy, C. Sexualité et hormones: les caractères sexuels considérés comme phénomènes de développement et dans leurs rapports avec l'hormone sexuelle. Pp. 1–376 7 pls. Paris (Doin) 1924. [Review Nature **115** p. 7.]

60.—Champy, C. Sur les conditions qui règlent la quantité des variants sexuels. C.R. Soc. Biol. Paris **90** 1924 pp. 37–39.

61.—Champy, C. Considérations paradoxales sur la puberté. C.R. Soc. Biol. Paris **90** 1924 pp. 81–83.

62.—Child, C. M. The problem of pattern in organisms. Amer. Nat. New York **58** 1924 pp. 115–126 323–336.

63.—Child, C. M. Modification of development in relation to differential susceptibility. Amer. Nat. New York **58** 1924 pp. 237–253.

64.—Clark, A. H. A comparative study of the most ancient and the recent marine faunas. J. Washington Acad. Sci. **14** 1924 pp. 487–491.

Clarke, N. T. *vide* Bishop.

65.—Clément, H. Méthode simple de conservation et de momification des animaux. C.R. Soc. Biol. Paris **90** 1924 pp. 497–498.

66.—Clementi, A. Contributo alla conoscenza della pressione osmotica nell'organismo degli invertebrati terrestri. Atti R. Accad. Naz. Linc. Roma (5) **33** 1e sem. 1924 pp. 362–364.

Collier, W. A. *vide* Abderhalden.

Contreras F. Catalogo alfabetico de nombres vulgares y cientificos de Animales que existen en Mexico. Secretaria de Agricultura y Fomento. Dirreccion de Estudios Biologicos. Pp. 1–13 Mexico 1924 4to.

68.—Cook, O. F. Are any species uniform? or should the assumption of "pure" species be discarded and diversity recognised as the normal evolutionary condition. J. Heredity Washington **13** 1922 285–287.

69.—Corti, A. Sul significato morfologico e funzionale dell'intestino ceco. Riv. Biol. Roma **5** 1923 pp. 16–44 187–208.

70.—Crew, F. A. E. The sex ratio and the question of its control. Internat. Rev. Sci. Pract. Agric. Rome N.S. **2** 1924 pp. 554–570.

71.—Cuénot, L., Lienhart, R., et Vernier, P. Sur la transmissibilité d'un caractère acquis (cataracte de Lapins). C.R. Acad. Sci. Paris **178** 1924 pp. 1129–1132.

72.—Dakin, W. J. and Fordham, M. G. C. The chemotaxis of spermatozoa and its questioned occurrence in the Animal Kingdom. Brit. J. Exper. Biol. Edinburgh **1** 1924 pp. 183–200.

73.—Dalcq, A. Une méthode nouvelle de parthénogénèse expérimentale. Ann. Bull. Soc. Roy. Sci. Med. Nat. Bruxelles **1924** pp. 175–187.

74.—Dalcq, A. Sur une méthode nouvelle de parthénogenèse experimentale et son interprétation. C.R. Acad. Sci. Paris **179** 1924 pp. 1358–1361.

Dalcq, A. *vide* Duesberg.

75.—Danini, E. S. Zur Frage über der Bau des Uebergangsepithels. Zs. Ges. Anat. München Abt. 1 **74** 1924 pp. 297–317.

76.—Dart, R. A. The anterior end of the neural tube and the anterior end of the body. J. Anat. London **58** pp. 181–205 4 figs.

77.—Deegeneer, P. Handbuch für das mikroskopisch-zoologische Praktikum der wirbellosen Tiere. 1te. Lief. Pp. 60 Berlin & Leipzig (de Gryter) 1923.

78.—Dekhuysen, M. C. and Heyde, H. C. van der. Mechanical staining of microscopic preparations. Anat. Rec. Philadelphia **27** 1924 pp. 259–268 3 figs.

79.—Delap, M. J. Further notes on the plankton of Valentia Harbour. Irish Nat. Dublin **33** 1924 pp. 1–6.

80.—Della Valle, A. La prima formazione dell'Embrione degli Omeotermi durante la fase della nota primitiva. Rend. Acc. sci. Napoli (3) **29** 1923 pp. 141–145.

81.—Delsman, H. C. The origin of Vertebrates. Amer. J. Sci. New Haven (5) **8** 1924 pp. 151–158.

82.—Derjugin, K. Das Barents Meer längs dem Kola-Meridian. Intern. Rev. Hydrobiol. Leipzig **12** 1924 pp. 145–174.

83.—Diamare, V. Sui corpi mielinici del sangue e dei muscoli striati e sull' anisotropismo della fibra striata. Riv. Biol. Roma **5** 1923 pp .710–723 1 pl.

84.—Dollfus, R. P. Contribution à la faune des Invertébrés du banc de Rockall. Bul. Inst. Ocean. Monaco no. **438** 1924 pp. 1–28.

85.—Dombrowski, B. Ueber einige Gesetzmassigkeiten im Aufbau des Schalleitenden und Kieferapparates der Tetrapoden. Zs. ges. Anat. München Abt. 1 **75** 1924 pp. 69–81 6 figs.

86.—Doncaster, L. An introduction to the study of Cytology. 2nd ed. Pp. xiv + 280 24 pls. Cambridge (Univ. Press) 1924 8vo.

87.—Dorello, P. Nuovi orizzonti della morfologia. Riv. Biol. Roma **5** 1923 pp. 315–328.

Dover, C. *vide* Huxley.

88.—Drosgleever-Fortuyn, C. E. Further researches on periodic nuclear division. Versl. Wis. Nat. Afd. K. Akad. Wet. Amsterdam **27** 1924 pp. 158–160.

89.—Duerden, J. E. Methods of Evolution. S. Afr. J. Sci. Johannesburg **20** 1923 pp. 357–365.

90.—Duesberg, J. Longueur du fuseau et cytodiérèse. C.R. Soc. Biol. Paris **90** 1924 pp. 627–630; also **A. Dalcq** and **A. Brachet** pp. 630–632.

91.—Duprè, F. L'origine delle domesticita. Natura Milano **15** 1924 pp. 153–169.

92.—Duval, M. Réaction ionique du sang de quelques Invertebrés. C.R. Acad. Sci. Paris **179** 1924 pp. 1629–1631.

93.—Eggeling, H. v. Paul Mayer†. Anat. Anz. Jena **58** 1924 pp. 88–93 portr. bibliogr.

94.—Elles, G. L. Evolutional palaeontology in relation to the lower Palaeozoic rocks. Rep. Brit. Assoc. London **91** 1924 pp. 83–107.

95.—Elton, C. S. Periodic fluctuations in the numbers of animals: their causes and effects. Brit. Journ. Exper. Biol. Edinburgh **2** 1924 pp. 119–163.

96.—Fabiani, R. La legge dell'irradiamento adattativo nell'evoluzione dei vertebrati. Natura Milano **15** 1924 pp. 45–66 12 figs.

97.—Fadda, G. Le dilatazioni e contrazioni dell aggregato blastomerico durante la segmentazione. Natura Milano **15** 1924 pp. 67–72.

98.—Faddo, G. e **Sciacchitano,** I. Il valore del solco polare in relazione a quello del diametro della membrana di fecondazione. Atti Accad. Naz. Linc. Roma (5) **33** 1e. sem. 1924 pp. 524–528. fig.

99.—Feulgen, R. und **Voit,** K. Ueber den Mechanismus der Nuclealfärbung. II. Mitt. Ueber des Verhalten der Kerne partiell hydrolysierter mikroscopischer Präparate zur fuchsinschwefligen Säure nach voraufgegangener Behandlung mit Phenylhydrazin. Hoppe-Seylers Zs. physiol. Chem. Berlin **136** 1924 pp. 57–61.

100.—Fici, S. Contributo allo studio dei trapianti testicolari. Monitore Zool. Ital. Firenze **35** 1924 pp. 73–79 2 figs.

101.—Fick, R. Einiges über Vererbungsfragen. Abh. Ak. Wiss. Berlin **1924** no. 3 pp. 1–34 figs.

102.—Filipjev, J. Quelques mots sur les problèms fondamentaux et les méthodes de la faunistique et la zoogéographie des animaux invertebrés terrestres. C.R. Acad. Sci. Russ. Petrograd **1923** A pp. 78–81. [Russian.]

103.—Filipjev, I. N. Esai d'une définition exacte des termes principaux se rapportant à la distribution des animaux habitants le fond des eaux. Russ. Hydrobiol. Zeits. Saratov. **3** 1924 pp. 1–8. [Russian and French rés.]

104.—Fischer, B. Vitalismus und Pathologie. Vortr. & Aufs. Entwick. Organ. Berlin 1924 pt. 34 pp. 1–173.

105.—Fleischmann, A. Der Rumpfhang (Splanchnon) der Wirbeltiere. Untersuchungen zur vergleichenden Systematik der Eingeweide. Zs. Morph. Ökol. Berlin **2** 1924 pp. 505–566 47 text-figs.

Fordham, M. G. C. *vide* Dakin.

106.—Fox, H. M. Note on Kammerer's experiments with *Ciona* concerning the inheritance of an acquired character. J. Genetics Cambridge **14** 1924 pp. 89–91 1 pl.

107.—Franz, V. Geschichte der Organismen. Pp. xiii + 948 Jena (Fischer) 1924. [Review Nature **114** pp. 889–890.]

108.—Frisch, K. v. Sinnesphysiologie der Wassertiere. Verh. D. zool. Ges. Berlin **29** 1924 pp. 21–42 2 figs.

109.—Fry, H. J. Cell dissection by hand. Anat. Rec. Philadelphia **28** 1924 pp. 371–377 2 figs.

110.—Galtsoff, P. S. Limnological observations in the Upper Mississippi, 1921. Bull. U. S. Fish. Comm. **39** 1924 pp. 347–348.

111.—Gandolfo, S. A propos de la nature des cellules sanguines primatives. C.R. Soc. Biol. Paris **91** 1924 pp. 139–140.

112.—Gardiner, J. S. The biology of the Suez Canal. Nature London **114** 1924 p. 866.

113.—Gargano, C. Considerazioni sulla morfologia delle cellule coltivate in vitro rispetto a quelle di elementi normalmenti liberi in tessuti patologico Boll. Soc. Nat. Napoli **35** 1923 pp. 221–244 21 figs.

114.—Gargano, C. La cultura dei tessuti "in vitro." Monitore Zool. Firenze **35** 1924 pp. 43–44; also G. **Levi** pp. 69–70.

115.—Gatenby, J. B. Chemotaxis of spermatozoa and its questioned occurrence in the Animal Kingdom. Nature London **113** 1924 pp. 275. See also **Dakin** and **Fordham.**

Gatenby, J. B. *vide* Brambell.

116.—Gates, R. R. Polyploidy. Brit. Journ. Exper. Biol. Edinburgh **1** 1924 pp. 153–182.

117.—Gates, R. R. Species and chromosomes. Nature London **114** 1924 pp. 353–356.

118.—Gelderen, C. van. Zur vergleichenden Anatomie des Sinus durae matris. Anat. Anz. Jena **57** 1924 pp. 472–487 2 figs.

119.—Gellhorn, E. Physiologische Untersuchungen an Spermatozoen und Eiern. Ein Beitrag zum Befruchtungsproblem. Arch. mikrosk Anat. Entwickl. Berlin **101** 1924 pp. 437–443.

120.—Gérard, P. Les nouvelles idées sur la structure du tissu conjunctif. Leur importance au point de vue practique. Ann. Bul. Soc. R. sci. Méd. Nat. Bruxelles **1923** pp. 221–226.

121.—Getzendaner, F. M. A hypothesis of "valence" in heredity and evolution. Amer. Nat. New York **58** 1924 pp. 426–435.

122.—Ghigi, A. Rapporti faunistici tra la Cirenaica ed i paesi del mediterraneo orientale. Riv. Biol. Roma **6** 1924 pp. 187–200.

123.—Giglio-Tos, E. Entwicklungsmechanische Studien. V. Teil: Die Furchung unter kunstlichen Bedingungen. Arch. mikrosk. Anat. Entwickl. Berlin **103** 1924 pp. 206–258 3 figs.

124.—Giglio-Tos, E. Entwicklungsmechanische Studien. IV. Die inäquale und partielle Furchung. Arch. mikrosk. Anat. Entwickl. Berlin **100** 1924 pp. 517–541.

125.—Giglio-Tos, E. La pretesa migrazione del cromosomi verso i poli durante l'anafase della cariocinesi. Atti R. Accad. Naz. Linc. Roma (5) **33** 1e. Sem. 1924 pp. 316–330.

126.—Giglio-Tos, E. Alcune mie curiose previsione verificate dall'embriologia sperimentale. Atti R. Accad. Naz. Linc. Roma (5) **33** 1e. sem. 1924 pp. 451–455.

127.—Giglio-Tos, E. Studi sulla meccanica dello sviluppo. i.—La cario cinesi. **5** 1923 pp. 587–614. ii.—I fenomeni della fecondazione. **6** 1924 pp. 137–160. Riv. Biol. Roma.

128.—Gilchrist, J. D. F. The South African Seas, with bibliography. S. Afr. J. Sci. Johannesburg 20 1923 pp. 1–27.

129.—Golgi, M. E. C. Intorno alla struttura ed alla biologia dei cosidetti globuli (o piastrine) del tuorlo. Mem. Ist. Lomb. Milano **22** 1923 pp. 161–173 1 pl.

130.—Goodrich, E. S. Living organisms. An account of their origin and evolution. Pp. 1–200 60 figs. 1 portr. Oxford (Clarendon Press) 1924 8vo.

131.—Gräper, L. Gedanken über die tierische Entwicklung. Anat. Anz. Jena **58** 1924 pp. 80–88.

132.—Gray, J. The mechanism of ciliary movement. iv. The relation of ciliary activity to oxygen consumption. Proc. R. Soc. London **B 96** 1924 pp. 95–114.

133.—Greil, A. Neue Aufgaben und Ziele des anatomischen Unterrichts. Anat. Anz. Jena **57** 1924 pp. 416–432.

134.—Grieg, J. A. Evertebrater fra bankerne red Spitsbergen. Indsamlet av m.k. "Beaafjeld" og m.k. "Tovik" somrane 1923 og 1924. Bergens Mus. Aarb. **1923-4** no. 9 1924 pp. 1–33.

135.—Grinnell, J. Geography and evolution. Ecology Brooklyn **5** 1924 pp. 225–229.

136.—Groebbels, F. Beiträge zur histologischen Physiologie der Verdauungsdrüsen. Zs. Biol. München **80** 1924 pp. 1–22 5 figs.

137.—Günther, H. Beitrag zur Bionomie des Wachtums. Biol. Zentralb. Leipzig **44** 1924 pp. 300–308.

138.—Guyenot, E. L'Heredité. (Encyclopédie scientifique.) Pp. 1–463 Paris (Doin) 1924. [N.V.]

139.—Hagedoorn, A. C. Soortvormingen eugenetica. Genetica 's Gravenhage **6** 1924 pp. 401–463.

Hájek, F. *vide* Růžička.

140.—Haldane, J. B. S. A mathematical theory of natural and artificial selection. Trans. Phil. Soc. Cambridge U. K. **23** 1924 pp. 19–41. Part ii. The influence of partial self-fertilization in breeding, assortive mating, and selective fertilization on the composition of Mendelian populations and on natural selection. Proc. Cambridge Phil. Soc. (Biol. Sci.) **1** 1924 pp. 158–163.

141.—Hammar, J. A. Erik Müller† Anat. Anz. Jena **57** 1924 pp. 278–300 portr. & bibligr.

142.—Hance, R. T. Filing microscopic slides in a card catalogue. Anat. Rec. Philadelphia **28** 1924 p. 367–370 3 figs.

143.—Harms, W. Weitere Mitteilungen über die physiologische Geschlechtsumstimmung. Verh. D. Zool. Ges. Berlin **29** 1924 pp. 123–124.

144.—Harnisch, O. Studien zur Ökologie der Moorfauna. Biol. Zentralb. Leipzig **44** 1924 pp. 110–127.

145.—Harrison, R. G. Neuroblast versus sheath cell in the development of peripheral nerves. J. Neurol. Philadelphia **37** 1924 pp. 123–205 5 pls. 25 text-figs.

Hartmann, A. *vide* Pauli.

146.—Hartmann, M. Allgemeine Biologie: eine Einführung in die Lehre vom Leben. Erster Teil: Zelle, Statik, Dynamik und Stoffwechsel. Pp. vi + 262 Jena (G. Fischer) 1924 8vo. [N.V.]

147.—Hatt, R. T. The Land Vertebrate communities of western Leelanan County, Michigan, with an annotated list of the Mammals of the County. Papers Michigan Acad. Sci. New York **3** 1924 pp. 369–402 6 photos.

148.—Hay, O. P. On the status of privately issued papers on systematic zoology. Proc. Biol. Soc. Washington **37** 1924 pp. 109–112.

149.—Headland, C. L. A simple and rapid photomicrograph for embryological sections. Anat. Rec. Philadelphia **27** 1924 pp. 145–150 3 figs.

150.—Heider, K. Gedächtnisrede auf Willy Georg Kükenthal. Sitzb. Ak. Wiss. Berlin **1924** pp. xcix–ciii.

151.—Heilbrum, L. V. The colloid chemistry of protoplasm. Amer. J. Physiol. **68** 1924 pp. 645–648 1 fig. **69** 1924 pp. 190–199 1 fig.

152.—Held, H. Ueber die Entwicklung des Axenskeletts der Wirbeltiere. 1. Die Bildung der Chordascheiden. Abh. Sach. Akad. Wiss. Leipzig **38** no. 5 1921 pp. 1–30 8 pls.

153.—Hentschel, E. Grundzüge der Hydrobiologie. Pp. vi + 221 Jena (Fischer) 1923 [N.V.]

154.—Heringa, G. C. L'usage de la gélatine pour le collage des coupes a congélation. C.R. Soc. Biol. Paris **91** 1924 p. 951.

155.—Herrera, L. A. Sull'imitazione della struttura del protoplasma e la divisione cellulare. Atti R. Accad. Naz. Lincei Roma (5) **33** 1e. Sem. 1924 pp. 101–102.

156.—Herrick, C. J. Neurological foundations of animal behaviour. Pp. xii + 334 New York (Holt) 1924 8vo. [N.V.]

157.—Herwerden, M. A. van. Einige Bemerkungen über das mikroskopische Bild der lebenden Zelle. Anat. Anz. Jena **59** 1924 pp. 93–96.

158.—Hesse, R. Tiergeographie auf ökologischer Grundlage. Jena (Fischer) 1924. [N.V.]

159.—Hewitt, J. Remarks on the distribution of animals in South Africa. S. Afr. J. Sci. Johannesburg **20** 1923 pp. 96–123 7 maps.

160.—Hewitt, J. Is evolution reversible? S. Afr. J. Sci. Johannesburg **21** 1924 pp. 425–431 1 pl.

Heyde, H. C. van der *vide* Dekhuysen.

161.—Hickson, S. J. Outline classification of the Animal Kingdom. 5th ed. pp. 1–28 Manchester (Museum Handbooks) 1924 8vo.

162.—Hill, A. V. Living mechanism: its physical analysis and its biological synthesis. Proc. R. Phil. Soc. Glasgow **52** 1924 pp. 58–77.

163.—Hill, L. The atmospheric conditions at the Zoological Gardens, London. Proc. Zool. Soc. London **1924** pp. 333–343.

164.—Hirschler, J. Sur une méthode de noircissement de l'appareil de Golgi. C.R. Soc. Biol. Paris **90** 1924 p. 893.

Hobson, A. D. *vide* Hogben.

165.—Hoepke, H. Epithelfasern und Basalmembran. Verh. Anat. Ges. in Anat. Anz. Jena **58** 1924 pp. 147–155.

166.—Hoepke, H. Ueber Begriff und Einteilung des Hermaphroditismus. Zs. ges. Anat. München **71** 1924 pp. 304–312.

167.—Hogben, L. T. The pigmentary effector system: A review of the physiology of colour response. Pp. xi + 152 17 figs. Edinburgh & London (Oliver & Boyd) 1924 8vo. [Review Nature **115** pp. 147–148.]

168.—Hogben, L. T. and **Hobson,** A. D. Studies in internal secretion. iii. The action of pituitary extract and adrenaline on contractile tissues of certain Invertebrata. Brit. J. Exper. Biol. Edinburgh **1** 1924 pp. 487–500.

169.—Homann, H. Der Vertikal-illuminator als Augenspiegel bei kleinen Augen. Biol. Zentralbl. Leipzig **44** 1924 pp. 582–591 7 figs.

170.—Hopkins, A. E. The appearance of nissl substance in nerve cells following variations in fixation. Anat. Rec. Philadelphia **28** 1924 pp. 157–163.

171.—Huxley, J S. Early embryonic differentiation. Nature London **113** 1924 pp. 276–278 569–570, 822; also C. T. **Regan** p. 569; C. **Dover** p. 712; J. T. **Cunningham 114** pp. 9–10; C. **Dover 114** p. 10.

172.—Issel, R. Alcuni studî recenti sul Plancton marino. Rendic. Convegno Genova U.Z.I. 1923 p. 5 [in Monit. Zool. Ital. Firenze **35** pt. 11, 1924].

173.—Jackson, B. D. Linnaeus (Afterwards Carl von Linné). Pp. xvi + 416 maps and illustr. London (Witherby) 1923 8vo.

174.—Jespersen, P. On the quantity of Macroplankton in the Mediterranean and the Atlantic. Intern. Rev. Hydrobiol. Leipzig **12** 1924 pp. 102–115.

175.—Jickeli, C. F. Pathogenesis. Die Unvollkommenheit des Stoffwechsels und die Tendenz zur Stabilität als Grundprinzipien für Vergehen und Werden im Kampf ums Dasein. Verh. Mitt. siebenb. Ver. Naturw. Hermanstadt **72–74** 1924 pp. 1–11.

176.—Johansson, J. E. De senaste upptäckterna rörande muskelprocessen. Fauna och Flora Stockholm for **1924** pp. 1–9.

177.—Juday, C. Summary of quantitative investigations on Green Lake, Wisconsin. Intern. Rev. Hydrobiol. Leipzig **12** 1924 pp. 2–12.

178.—Kalwaryjski, B. E. Eclaircissement des préparations histologiques. C.R. Soc. Biol. Paris **90** 1924 pp. 904–905.

179.—Keibel, [F.] Gedächtnisrede auf Oskar Hertwig. Sitzb. Ak. Wiss. Berlin **1924** pp. xcviii–xcix.

180.—Keibel, F. Zum Kopfproblem. Sitzb. Ak. Wiss. Berlin **1924** pp. 30–43.

181.—Kingsbury, F. The significance of the so-called law of cephalo-caudal differential growth. Anat. Rec. Philadelphia **27** 1924 pp. 305–331.

182.—Kingsbury, B. F. and **Adelmann,** H. B. The morphological plan of the head. Q. J. Micros. Sci. London **68** 1924 pp. 239–341.

183.—Knipowitsch, N. M. Über die Verteilung des Lebens in Schwarzen Meere. Russ. Hydrobiol. Zeits. Saratow. **3** 1924 pp. 199–204. [Russian, with German rés.]

184.—Koltzoff, N. Experimental Biology and the work of the Moscow Institute. Science New York **59** 1924 pp. 497–502.

185.—Kordes, P. J. The use of neutral red and janus green as a cytological stain. Anat. Rec. Philadelphia **27** 1924 pp. 23–28; see also H. S. **Paris** pp. 241–243.

186.—Křiženecký, J. Ein Beitrag zur Kenntnis der entwicklungsmechanischen Wirkung des Adrenalius und ihm ähnlicher Stoffe. Arch. mikrosk. Anat. Entwickl. Berlin **101** 1924 pp. 558–620.

187.—Křiženecký, J. Die heutige Vererbungswissenschaft und ihre neuen Aufgaben. Riv. Biol. Roma **6** 1924 pp. 1–16.

188.—Kulchitsky, N. Nerve endings in muscles. J. Anat. London **58** 1924 pp. 152–169 4 pls.

189.—Kunstler, J. et **Prévost,** F. La matiere vivante, organisations et differenciations, origines de la vie, colloides et mitochondries. Pp. 253 Paris (Masson) 1924 8vo. [N.V.]

190.—Kusnezov, N. N. Die Bedeutung der Eiszeit in der Entwicklung der Fauna Turkestans. Zool. Anz. Leipzig **59** 1924 pp. 52–55.

191.—Labbé, A. Introduction à l'étude des milieux marins hyperalcalins. Arch. zool. Paris **62** 1924 pp. 401–568 56 figs.

192.—Lange, D. de. Die Bildung der Fötalanhänge und der Placenta bei den Amnioten. Anat. Anz. Jena **58** 1924 pp. 287–303 6 figs.

193.—Lataste, F. Orientation initiale du membre postérieur des Vertébrés. C.R. Soc. Biol. Paris **90** 1924 pp. 1010–1012 ; also pp. 1217–1218.

194.—Lataste, F. La symétrie et la loi d'union des parties similaires. C.R. Soc. Biol. Paris **91** 1924 pp. 855–857.

195.—Lemos, R. de. As "Gitterfäsern" e o seu comportamento nos blastomas. Revista sintética e observacóes pessoais sôbre 88 casos. J. Sci. Lisboa **22** 1923 pp. 181–232.

196.—Lengerken, H. v. Extraintestinale Verdauung. Biol. Zentralb. **44** 1924 pp. 273–295 8 figs.

197.—Leon, N. Animalele noastre veninoase. Mem. Sec. Sci. Academia Română Bucuresti (3) **1** 1924 pp. 259–285.

198.—Levi, G. L'instabilità di forma del condrioma nelle cellule viventi. Monitore Zool. Ital. Firenze **35** 1924 pp. 33–41 2 figs.

199.—Levi, G. L'accrescimento delle cellule nervose considerato in funzione della grandezza corporea definitiva e della velocità di accrescimento. Riv. Biol. Roma **6** 1924 pp. 458–466.

Levi, G. *vide* Gargano.

Lienhart, R. *vide* Cuénot.

200.—Lillie, R. S. The physicochemical conditions of morphogenesis. Amer. Nat. New York **58** 1924 pp. 219–236.

201.—Lucas, N. S. Report on the deaths which have occurred in the Society's Gardens during 1923. Proc. Zool. Soc. London **1924** pp. 293–296.

202.—Ludford, R. J. Experiments on the impregnation of the Golgi apparatus by means of Osmium Tetroxide. J. R. Microsc. Soc. London **1924** pp. 269–280 1 pl. 3 text-figs.

203.—Ludford, R. J. Cell organs during keratinization in normal and malignant growth. Q. J. Microsc. Sci. London **69** 1924 pp. 28–57 3 pls. 9 text-figs.

204.—Lund, E. J. Experimental control of organic polarity by the electric current. iv. The quantitative relations between current density, orientation and inhibition of regeneration. J. Exper. Zool. Philadelphia **39** 1924 pp. 357–377 3 pls. 2 text-figs.

205.—MacBride, E. W. An introduction to the study of heredity. Pp. 1–256. London (Williams & Norgate) 1924. [Review Nature **114** p. 570.]

206.—McEwen, R. S. Vertebrate Embryology. Pp. xi + 544. New York (Holt) 1923 [N.V.]

207.—Mainx, F. Versuche über die Beeinflussung der Mitose durch Giftstoffe. Zool. Jahrb. Jena Abt. Allg. Zool. **41** 1924 pp. 553–580 4 textfigs.

208.—Marchlewski, T. et Skowron, S. Beitrag zur Histologie der Schilddrüse. Bul. Intern. Acad. Krakow **1922 B** 1923 pp. 89–92 1 pl.

209.—Marcus, E. Zur Frage der Tierverbreitung und pazifischen Landverbindung. Ergebn. Zool. Jena **6** 1924 pp. 1–26 map.

210.—Martini, E. Die Zellconstanz und ihre Beziehungen zu anderen zoologischen Vorwürfen. Zs. ges. Anat. München I Abt. **70** 1924 pp. 179–259.

211.—Martinotti, L. Tecnica per lo studio del processo della corneificazione della cute allo stato normale e patalogico. Zs. wiss. Mikrosk. Leipzig **41** 1924 pp. 202–237.

212.—Martinotti, L. Sulla tecnica dell'inclusione in paraffina e del sezionamento della cute e degli organi difficilmente sezionabili in genere. Zs. wiss. Mikrosk. Leipzig **41** 1924 pp. 238–258.

Marza, V. *vide* Parhon.

213.—Mather, J. Geologic factors in organic evolution. Ohio J. Sci. Columbus **24** 1924 pp. 117–145.

214.—Merton, H. Die verschiedenen Arten der Flimmerbewegung bei Metazoen. Naturwiss. Berlin **12** 1924 pp. 452–457 2 figs.

215.—Messjatzev, I. I. Beiträge zur Zoogeographie der russischen nördlichen Meere. Ber. Wissensch. Meeresinst. Moskau Lief **13** 1923 pp. 1–26 map. [Russian with German Rés.]

216.—Minkiewicz, St. Uebersicht der Fauna der Tatra-Seen. Spraw. Kom. fizyogr. Krakow **48** 1924 pt. 2 pp. 114–137 [Polish with German rés.]

217.—Monard, A. La Faune de la Motte. Lac de Neuchâtel. Rev. Hydrobiol. Aarau **2** 1922 pp. 150–187.

218.—Monari, D. Il problema delle interstiziali nel testicolo. Monitore Zool. Ital. Firenze **35** 1924 pp. 173–182.

219.—Monterosso, B. Esperimenti di pesca e ricerche di biologia marina con lampada elettrica and immersione russo. Atti Acc. Gioenia Catania (5) **12** 1920 mem. 13 pp. 1–16.

220.—Morelle, J. Le substance de Golgi dans les cellules pancréatique des Vertébrés. C.R. Soc. Biol. Paris **91** 1924 pp. 1173–1175.

221.—Morningstar, H. Catalogue of type fossils in the Geological Museum and the Ohio State University. Ohio J. Sci. Columbus **24** 1924 pp. 31–64.

222.—Mortaria, S. Sulla biofotogenesi e su alcuni batteri fotogeni. Riv. Biol. Roma **6** 1924 pp. 323–342 1 pl.

223.—Mortensen, Th. The Danish Expedition to the Kei Islands, 1922. Videns. Medd. nat. For. Kjøbenhavn **76** 1923 pp. 55–99 5 maps 1 fig.

224.—Mottram, J. C. On the evolution of secondary sexual characters. Science Progr. London **18** 1924 pp. 420–425.

225.—Moulin, F. de. Sur la structure du protoplasma. Arch. Anat. Hist. Embryol. Strasbourg **3** 1924 pp. 525–550.

226.—Mühlmann, M. Meine Theorie des Alterns und des Todes. Arch. path. Anat. Berlin **253** 1924 pp. 225–238.

227.—Munerati, O. Il sussidio della chimica negli studi di genetica. Riv. Biol. Roma **5** 1923 pp. 309–314.

228.—Muraveisky, S. D. Ueber das tierische Plankton des Flusses Kerschenetz. Arb. Biol. Wolga-Station, Saratow **7** No. 4–5 1924 pp. 125–141 1 Table. [Russian with German rés.]

229.—Muraveiski, S. D. Bemerkung über das Plankton des Sees Swetlojar, C. Russia. Russ. Hydrobiol. Zeits. Saratow **2** 1923 pp. 224–227.

230.—Murphy, H. E. Preliminary quantitative study of marine zooplankton at La Jolla, California. Ecology Brooklyn **5** 1924 pp. 283–286.

231.—Murray, J. A. The open-tube pyroxylin method of manipulating small organisms. J. R. Micros. Soc. London **1924** pp. 289–291 1 fig.

232.—Nauck, E. T. Die mechanische Erklärung der Beckenstellungen und der Wirbelsäulenwölbung bei Tetrapoden. Sitzb. Ges. Natw. Marburg for **1923** 1924 pp. 28–37 4 figs.

233.—Naumann, E. Notizen zur Ernährungsbiologie der limnischen Fauna. Ark. Zool. Stockholm **16** No. 12 1924 pp. 1–14.

234.—Naumann, E. Untersuchungen uber einige gallertführende Tiere des Limnoplanktons. Ark. Zool. Stockholm **16** No. 24 1924 pp. 1–12.

235.—Needham, J. The chemistry of embryonic development. Science Progr. London **19** 1924 pp. 70–85.

236.—Nikitin, V. Concerning the question of the vertical distribution and the lower limit of extension of plankton in the Black Sea. C.R. Acad. Sci. Russ. Leningrad **1924A** p. 30. [English.]

237.—Nuttall, G. H. F. Symbiosis in animals and plants. Rep. Brit. Assoc. London **91** 1924 pp. 197–214.

238.—Obermayer, H. Beiträge zur Kenntnis der Litoralfauna des Vierwaldstättersees. Rev. Hydrob. Aarau **2** 1922 pp. 3–105 maps and diagrams.

239.—Ostenfeld, C. H. and **Jespersen,** P. Standard Net for Plankton collections. Publ. explor. mer. Copenhague **84** 1924 pp. 1–16 11 figs.

Painlevé, J. *vide* Parat.

240.—Pantin, C. F. A. Temperature and the viscosity of protoplasm. J. Mar. Biol. Assoc. Plymouth **13** 1924 pp. 331–339.

241.—Parat, M. et **Painlevé,** J. Appareil réticulaire interne de Golgi, trophosphonge de Holmgren et vacuome. C.R. Acad. Sci. Paris **179** 1924 pp. 844–846.

242.—Parhon, C. I. et **Marza,** V. Le sexe des descendants des animaux éthyroidés. La diminution de leur vitalité. C.R. Soc. Biol. Paris **90** 1924 pp. 323–324.

Paris, H. S. *vide* Kordes.

243.—Parker, G. H. The growth of marine animals on submerged metals. Biol. Bul. Wood's Hole Mass. **47** 1924 pp. 127–142 5 pls.

244.—Pasquini, P. La distribuzione verticale ed orizzontale del plancton del lago Trasimeno in estate e sue variazioni. Riv. Biol. Roma **5** 1923 pp. 45–63.

245.—Patten, C. J. The passing of the phantoms : a study of evolutionary psychology and morals. Pp. 1–95 4 pls. London (Kegan, Paul) 1924. [Review Nature **115** p. 218.:

246.—Pauli, W. E. und **Hartmann,** A. Über die Wirkung von Kathodenstrahlen auf lebendes Gewebe. Arch. Mikrosk. Anat. Entwickl. Berlin **103** 1924 pp. 95–167 28 figs.

247.—Pawlowsky, E. N. Bemerkungen über zoologische Methodik. Zool. Anz. Leipzig **59** 1924 pp. 284–287 4 figs.

248.—Pearl, R. Starvation life-curves. Nature London **113** 1924 p. 854.

249.—Pesta, O. Hydrobiologische Studien über Ostalpenseen. Arch. Hydrobiol. Stuttgart Suppl. Bd. **3** 1924 pp. 384–596 1 map 19 figs.

250.—Peter. Über die Beziehungen der indirekten Zellteilung zur Zelltätigkeit. Verh. Anat. Ges. in Anat. Anz. Jena **58** 1924 pp. 131–135.

251.—Péterfi, T. und **Woerdemann,** M. W. Einfluss der mechanischen Reizung auf die Flimmerzellen. Biol. Zentralb. Leipzig **44** 1924 pp. 264–268 3 figs.

252.—Petersen, C. G. J. The necessity for quantitative methods in the investigation of the animal life on the sea-bottom. Proc. Zool. Soc. London **1924** pp. 687–694.

253.—Petersen, J. A brief survey of the animal communities in Danish waters, based upon quantitative samples taken with the bottom sampler. Amer. J. Sci. New Haven (5) **7** 1924 pp. 343–354 chart.

254.—Philiptschenko, J. Studien über Variabilität. 4.—Ueber die Variabilität der Embryonen. Zs. indukt. Abstammgslehre Leipzig **34** 1924 pp. 121–133 1 fig.

255.—Pike, F. H. On the difficulties encountered in the evolution of air-breathing vertebrates. Science New York **59** 1924 pp. 402–403.

256.—Plate, L. Allgemeine Zoologie und Abstammungslehre. 2te Teil. Die Sinnesorgan der Tiere. Pp. ix + 806 726 figs. Jena (G. Fischer) 1924. [Review Nature **114** p. 602.]

257.—Plate, L. Ueber den Ursprung der Wirbeltiere. Eine kritische Besprechung. Anat. Anz. Jena **58** 1924 pp. 39–46 5 figs.

258.—Poche, F. Über den Begriff des intracellulären Lumens. Zool. Anz. Leipzig **60** 1924 pp. 313–324 4 figs.

259.—Pollacci, G. Sulla nomenclatura di specie dedicate a persone. Riv. Biol. Roma **5** 1923 pp. 165–167.

260.—Pongràcz, A. Beiträge zur Tiergeographie Polens. Arch. Natg. Berlin **89** Abt. A Hft. 11 1924 pp. 244–259 map 5 text-figs.

261.—Potonié, H. W. Experimentell-kritische Untersuchung über die biologische Bedeutung des Umkehrpunktes in der Atmungsintensität kaltblütiger Tiere bei steigender Temperatur. Biol. Zentralb. Leipzig **44** pp. 16–57.

262.—Prell, H. Die uniformität der Bastarde. Arch. Entw.-Mech. Berlin **52** 1923 pp. 447–459.

263.—Prell, H. Zur Begriffsbildung in der Phänogenetik. Arch. Entw.-Mech. Berlin **52** 1923 pp. 460–479 3 figs.

Prévost, F. *vide* Kunstler, J.

264.—Priore, G. Lo uni- e plurinuclearità in piante ed animali. Riv. Biol. Roma **6** 1924 pp. 301–309 3 figs.

265.—Rahm, G. Weitere physiologische Versuche mit niederen Temperaturen (ein Beitrag zur Lösung des Kälteproblems). Verh. D. Zool. Ges. **29** 1924 pp. 106–111.

266.—Ranson, S. W. A method for preserving special dissections. Anat. Rec. Philadelphia **27** 1924 p. 257.

267.—Ranzi, S. La chiusura dell' otocisti, lo sviluppo del ductus endolymphaticus (o recessus labyrinthi ovvero aquaeductus vestibuli) e sua omologia nella serie dei Vertebrati. Atti R. Accad. Naz. Linc. Roma (5) **33** 1e sem. 1924 pp. 448–451.

268.—Redenz, E. Versuch einer biologischen Morphologie des Nebenhodens. Verh. physik. Ges. Würzburg N. F. **49** 1924 pp. 97–104.

269.—Reed, H. S. The nature of growth. Amer. Nat. New York **58** 1924 pp. 337–349.

270.—Regan, C. T. Mendelism and evolution. Nature London **113** 1924 pp. 50–51.

Regan, C. T. *vide* Huxley.

271.—Remy, P. Les sécrétions internes et les métamorphoses. Ann. Sci. Nat. Zool. Paris (10) **7** 1924 pp. 41–82.

272.—Rényi, G. v. Gibt es einen unmittelbaren Zusammenhang zwischen Muskel und Sehnenfibrillen während der Entwicklung der Muskelfaser? Anat. Anz. Jena **58** 1924 pp. 339–345 3 figs.

273.—Reswoy, P. D. Zur Definition des Biocönose-Begriffes. Russ. Hydrobiol. Zeits. Saratow **3** 1924 pp. 204–209. [Russian with German rés.]

274.—Riddle, O. Any hereditary character and the kinds of things we need to know about it. Amer. Nat. New York **58** 1924 pp. 410–425.

275.—Riikoja, H. Notes on the summerzooplankton of the Lakes Tamula and Vagula (Esthonia). Sitz-Ber. Natf. Ges. Dorpat **31** pt. 3 1924 pp. 1–25. (Esthonian with English rés.)

276.—Rio-Hortega, P. del. La microglia y su transformación en células en bastoncito y cuerpos gránuloadiposas. Trav. Lab. Invest. Biol. Univ. Madrid **18** 1920 pp. 37–82 11 figs.

277.—Rio-Hortega, P. Constitution histologique de la glande pinéale. 1.—Cellules parenchymatenses. Trav. Lab. Resh. Biol. Univ. Madrid **21** 1923 pp. 95–141 20 figs.

278.—Risch, C. Ein neues Verfahren zur Zählung der Plankton-Organismen. Arch. Hydrobiol. Stüttgart **15** 1924 pp. 416–421.

279.—Ritchie, J. Preservation of zoological specimens in fluid to preserve their natural colour. Mus. J. London **23** 1924 pp. 191–193.

280.—Rogers, A. F. Mineralogy and petrography of fossil bone. Bul. Geol. Soc. Amer. New York **35** 1924 pp. 553–556 4 pls.

281.—Romer, A. S. Pectoral limb musculature and shoulder-girdle structure in Fish and Tetrapods. Anat. Rec. Philadelphia **27** 1924 pp. 119–143 10 figs.

282.—Rubner, M. Ueber die Bildung der Körpermesse in Tierreich und die Beziehung der Masse zum Energieverbrauch. Sitz Ber. Ak. Wiss. Berlin **1924** pp. 217–234.

283.—Ruffini, A. Meccanica dello sviluppo embrionale e filogenesi. Monitore Zool. Ital. Firenze **35** 1924 pp. 117–124.

284.—Russell, E. S. The study of living things: Prolegomena to a functional biology. Pp. xx + 139 London (Methuen) 1924. [Review, see Nature **115** p. 218.]

285.—Růžička, V. and others. Beiträge zum Studium der Protoplasmahysteresis und der hysteretischen Vorgänge. (Zur Kausalität des Alterns.). I. Die Protoplasmahysteresis als Entropieerscheinung von V. R. pp. 459–482. II. Die physikalischen Voraussetzungen der hysteretischen Veränderungen von E. **Bauer** pp. 483–488. III. Ueber den Einfluss der inneren Sekretion auf die hysteretischen Prozesse von V. **Bergauer** pp. 498–498. IV. Ueber Protoplasmahysterese bei Entzündungsvorgängen von E. **Vejnarova** pp. 499–503. V. Hysterese während des Hungerns von A. **Svoboda** pp. 504–507 VI. Ueber die Ursachen des entgegengesetzten Verlaufs der [H.] und der Stabilitätsänderung der Kolloide bei dissimilatorischen Vorgängen, hervorgerufen durch Hyperthyreoidismus von V. **Bergauer** pp. 508–511. VII. Die Anwendung des Prinzipes der Hysterese zum gerichlichen Nachweis der Identität des Blutes von F. **Hajek** pp. 512–520. VIII. Versuche zur Theorie der vitalenletalen Färbung und ihres Zusammenhanges mit den hysterelischen Vorgängen von E. **Bauer** pp. 521–527. Arch. mikrosk. Anat. Entwickl. Berlin **101** 1924.

286.—Sacchetto, I. Della metaplasia condroosteoide. Monitore Zool. Ital. Firenze **35** 1924 pp. 110–117 2 figs.

287.—Sacchetto, I. Sul destino delle cellule cartilagince nell ossificazione encondrale e sulla funzione condroclastica degli osteoclasti di Kolliker. Monitore Zool. Ital. Firenze **35** 1924 pp. 201–207 1 fig.

288.—Salazar, A. L. La coloration nucléaire et de fond dans les coupes traitées par le tannin-fer. Anat. Rec. Philadelphia **28** 1924 pp. 305–308.

289.—Samojloff, J. Die Evolution des Mineralbestandes des Skeletts der Organismen. Centralb. Min. Stuttgart **1924** pp. 594–607.

290.—Sarasin, P. Über den kosmischen Ort der Entstehung des Lebens. Verh. Natf. Ges. Basel **35** Pt. 2 1924 pp. 18–57.

Sax, F. *vide* Castle.

291.—Schaffer, J. Zur Einteilung der Hautdrüsen. Anat. Anz. Jena **57** 1924 pp. 353–372.

292.—Schmidt, W. J. Ueber die Bedeutung polarisation mikroskopischer Forschungen in der Zoologie. Zs. wiss. Mikrosk. Leipzig **40** 1923 pp. 97–114.

293.—Schneider, R. Verbreitung und Bedeutung des Eisens im animalischen Organismus. (Im Besondern erforscht am Seetierleben des Golfes von Neapel). Arch. Natg. Berlin **90** Abt. A. **1** Hft 4 1924 pp. 1–48.

294.—Schulze, P. Der Nachweis und die Verbreitung des Chitins mit einem Anhang über das komplizierte Verdauungssystem der Ophryoscoleciden. Zs. Morph. Okol. Berlin **2** 1924 pp. 643–666 13 figs.

Sciacchitano, I. *vide* Fadda.

295.—Seifriz, W. The structure of protoplasm and of inorganic gels.: an analogy. Brit. J. Exper. Biol. Edinburgh **1** 1924 pp. 431–443.

296.—Seifriz, W. An elastic value of protoplasm, with further observations on the viscosity of protoplasm. Brit. J. Exper. Biol. Edinburgh **2** 1924 pp. 1–11.

297.—Shaner, R. F. On the muscular architecture of the ventricles of the Alligator heart, with a note on the formation of the inter-ventricular septum of Birds and Mammals. Anat. Record Philadelphia **29** 1924 pp. 21–32 6 figs.

298.—Sharpey-Schafer, Sir E. The endocrine organs. 2nd ed. Pt. i. The Thyroid, the Parathyroids and the Suprarenal Capsules. Pp. ix + 175 86 figs. London (Longmans) 1924. [Review Nature **115** p. 293.]

299.—Sherborn, C. D. Index animalium sive index nominum quae ab A.D. MDCCLVIII generibus et speciebus animalium imposita sunt. Sec. a kalendis Januariis MDCCCI usque ad finem Decembris MDCCCL Part iv pp. 641–943 London (Trustees Brit. Mus.) 1924 8vo.

Skowron, S. *vide* Marchlewski.

300.—Smirnov, E. Probleme der exakten Systematik und Wege zu ihrer Lösung. Zool. Anz. Leipzig **61** 1924 pp. 1–14.

301.—Sobotta, J. Ueber den Zusammenhang von Muskel und Sehne. Zs. mikrosk.-anat. Forschung Leipzig **1** 1924 pp. 229–244 1 pl.

302.—Spalteholz, W. Gefassbaum und Organbildung. Zs. Entw. Mech. Berlin **52** 1923 pp. 480–531.

303.—Spek, J. Kritisches Referat über die neueren Untersuchungen über den physikalischen Zustand der Zelle während der Mitose. Arch. mikrosk. Anat. Entwickl. Berlin **101** 1924 pp. 444–454.

304.—Spiridonovitch, R. The vital staining of white blood cells with cresylecht violet. Anat. Rec. Philadelphia **27** 1924 pp. 367–373.

305.—Stadler, H. Einiges über die Tierwelt Unterfrankens. 11 Beitrg. Arch. Natg. Berlin **90** Abt A Hft 1 1924 pp. 169–201 map.

306.—Steenberg, C. M. Christian Petersen [Danish biologist, founder of the "quotient law" in the growth of the organisms, 1864–1922]. (Danish.) Videns. Medd. nat. For., Kjøbenhavn **76** 1923 pp. xiii–xvii 1 portr.

307.—Stejneger, L. A chapter in the History of Zoological Nomenclature. Smithsonian Misc. Coll. Washington **77** 1924 pp. 1–21.

308.—**Stephensen, K.** In memoriam Carl With [Danish zoologist, 1877–1923]. (Danish.) Videns. Medd. nat. For. Kjøbenhavn **76** 1923 pp. v–xi 1 portr.

309.—**Stieve, H.** Johannes Rückert †. Anat. Anz. Jena **57** 1924 pp. 305–352 portr. bibliogr.

310.—**Stiles, C. W.** Zoological nomenclature: Official list of certain generic names. Nature London **113** 1924 pp. 821–822.

311.—**Stockard, C. R.** The structure of the vertebrate eye as an index of developmental deficiencies: with the bearing on inheritance studies. Amer. Nat. New York **58** 1924 pp. 24–35.

312.—**Strangeways, T. S. P.** Tissue culture in relation to growth and differentiation. Pp. x + 50 Cambridge (Heffer) 1924 8vo. [N.V.]

313.—**Strangeways, T. S. P.** The technique of tissue culture "in vitro." Pp. viii + 80 Cambridge (Heffer) 1924. [N.V.]

314.—**Studnicka, F. K.** Muskelfasern und Bindegewebsfibrillen. Anat. Anz. Jena **57** 1924 pp. 432–446 3 figs.

315.—**Sturtevant, A. H.** An interpretation of orthogenesis. Science New York **59** 1924 pp. 579–580.

316.—**Sumner, F. B.** The stability of subspecific characters under changed conditions of environment. Amer. Nat. New York **58** 1924 pp. 481–505.

Svoboda, A. *vide* Růžička.

317.—**Swelt, F. H.** Exceptions to Bateson's rules of minor symmetry. Anat. Rec. Philadelphia **28** 1924 pp. 63–77 15 figs.

318.—**Tauson, A.** Der Einfluss der Wasserstoffionen und die antagonistische Einwirkung der Rationen auf das Ueberleben von Tieren (*Asplanchna, Cyclops*) *Daphnia* und *Lumbriculas*). Bul. Inst. Rech. Biol. Perm **3** 1924 pp. 53–68. [Russian and Germ. rés.]

319.—**Terni, T.** I tessuti a grandi cellule vescicolose con glicogeno. Monitore Zool. Ital. Firenze **35** 1924 pp. 13–24 10 figs.

320.—**Thacker, A. J.** Some statistical aspects of geographical distribution. Proc. Cambridge Phil. Soc. (Biol. Sci.) 1 1924 pp. 134–137.

321.—**Thomson, G. M.** Naturalized animals and plants [in New Zealand]. N. Z. J. Sci. Techn. Wellington **6** 1923 pp. 223–231.

322.—**Thorpe, M. R.** [edited by]. Organic adaptation to environment. Pp. xviii + 312 New Haven (Yale Univ. Press) 1924 8vo. [N.V.]

323.—**Trueman, A. E.** The species concept in Palaeontology. Geol. Mag. London **61** 1924 pp. 355–360; see also W. D. Lang pp. 526–527.

324.—**Ubisch, L. v.** Wegeners Kontinental-Verschiebungstheorie und die Tiergeographie. Verh. physik. Ges. Würzburg **46** 1921 pp. 57–69.

325.—**Veit, O.** Entwicklungsgeschichte und vergleichende Anatomie in ihren Wechsel-beziehungen zueinander, erörtert an dem Problem des Wirbeltierkopfes. Anat. Anz. Jena **58** 1924 pp. 374–393 7 figs.

Vejnarova, E. *vide* Růžička.

Vernier, P. *vide* Cuénot.

326.—**Vincent, S.** An introduction to the study of secretion. Pp. 1–168 London (Arnold) 1924. [Review Nature **115** p. 293.]

Vintemberger, P. *vide* Ancel.

Voit, K. *vide* Feulgen.

327.—**Vonwiller, P.** Eine neue Mikroskopiermethode für die Beobachtung lebender Organismen und ihre ersten Ergebnisse. Zs. wiss. Mikrosk. Leipzig **41** 1924 pp. 190–201.

328.—**Waldau, G.** Vulkanutbrottets inverkan på naturen i Kamerun. [Effects of a volcanic action on animal life in Cameroon.] Fauna och Flora Stockholm **1924** pp. 157–160.

329.—**Wallin, I. E.** On the nature of mitochondria. vi. Further observations on fragility and staining reactions of mitochondria and bacteria. **32** 1924 pp. 467–474. vii. The independent growth of mitochondria in culture media. **33** 1924 pp. 147–173 2 pls. Amer. J. Anat. Philadelphia.

330.—Walton, A. Studies on the physiology of reproduction. 1.—The flocculation of sperm suspensions in relation to surface change. Brit. J. Exper. Biol. Edinburgh **2** 1924 pp. 13–20.

331.—Ward, H. B. Present lines of attack on Animal Parasitology. Science New York **59** 1924 pp. 305–310.

332.—Watson, H. The application of the Law of Priority. Ann. Mag. N. H. London (9) **14** 1924 pp. 328–337.

333.—Westblad, E. Eine Methode zur Fixierung und zum Einschluss mit Alizarin vitalgefärbter Objekte. Zool. Anz. Leipzig **59** 1924 pp. 219–222.

334.—Wilson, J. T. On the application of the spalteholtz clearing method to the study of thick serial sections of embryos with demonstration of specimens. J. Anat. London **58** 1924 pp. 101–104.

335.—Witschi, E. Überreife der Eier als kausaler Faktor bei der Entstehung von Mehrfachbildungen und Teratomen. Verh. Natf. Ges. Basel **34** 1923 pp. 33–40 1 pl. 3 text-figs.

Woerdemann, M. W. *vide* Péterfi.

336.—Yakovleff, N. L'extinction des animaux et des plantes et ses causes d'apres les données de la géologie. Bul. Com. Geol. Petrograd **41** 1922 pp. 17–31.

337.—Yule, G. V. A mathematical theory of evolution, based on the conclusions of Dr. J. C. Willis, F.R.S. Phil. Trans. R. Soc. London Ser. B **213** 1924 pp. 21–87 14 charts.

338.—Želizko, J. V. La faune quaternaire de Volyně (Remarques finales sur les recherches de l'année 1920) avec coup d'oeil d'ensemble sur la faune découverte depuis 1902. Sbornik Statn. Geol. Ust. Ceskoslov. Praze (Prague) **4** 1924 pp. 101–115.

339.—Ziegler, H. E. Die Phylogenie des Schmerzes. Zool. Anz. Leipzig **61** 1924 pp. 43–48.

340.—Ziegler, H. E. Ueber das Übel der neuen Nomenklatur. Zool. Anz. Leipzig **61** 1924 pp. 187–190.

II.—SUBJECT INDEX.

The full reference will be found under "Titles" by means of the author's name and number.

COMPREHENSIVE AND GENERAL.

Textbooks and General Works.—Franz, **107**; Goodrich, **130**; Hartmann, **146**; Plate, **256**; Growth, de Beer, **24**; Embryology, McEwen, **206**; Cytology, Doncaster, **86**; Methods, Degeneer, **77**; Hydrozoology, Hentschel, **153**.

General Biology and Hyperzoology.—Ashworth, **15**; Bateson, **19**; Gates, **117**; Koltzoff, **184**; Kunstler & Prévost, **189**; Russell, **284**; Origin of life, Sarasin, **290**; Heredity, MacBride, **205**; Vitalism and Pathology, Fischer **104**; Pattern and Morphogenesis, Child, **62, 63**; Growth Reed, **269**; Symbiosis, Nuttall, **237**; Palaeontology, Elles, **94**.

Biography and Obituaries.—N. Annandale, Anon, **12**; O. Hertwig, Keibel, **179**; W. G. Kükenthal, Heider, **150**; Linnaeus, Jackson, **173**; P. Mayer, Eggeling, **93**; E. Müller, Hammar, **141**; C. Petersen, Steenberg, **306**; J. Rückert, Stieve, **309**; J. W. Sprengel, Becher, **23**; C. Witt, Stephensen, **308**.

Bibliography.—Gilchrist, **128**.

Naturalization.—In New Zealand, Thomson, **321**.

Domestication.—Origin of, Duprè, **91**.

Economics.—River Pollution, Carpenter, **56**; Poisonous animals, Leon, **197**.

Museums.—Catalogue of type specimens, Morningstar, **221**.

Methods and Technique; Collection.—Apparatus for Lakes, André, **9**; Electric light for collecting, Monterosso, **219**; Plankton nets, Ostanfeld & Jespersen, **239**; Counting plankton, Risch, **278**.

Preservation Methods.—Mummifying, Clément, **65**; Preserving dissections, Ranson, **266**; Preserving colour, Ritchie, **279**.

Microscopic Methods.—General, DEGENER, **77**; Fixation, WESTBLAD, **333**; HERINGA, **154**; Staining, CAJAL, **52, 53**; DEKHUYSEN & V. D. HEYDE, **78**; FEULGEN & VOIT, **99**; HIRSCHLER, **164**; KORDES, **185**; LUDFORD, **202**; MARTINOTTI, **211**; SALAZAR, **288**; SPIRIDONOVITCH, **304**; Clearing methods, KALWARYJSKI, **178**; WILSON, **334**; Embedding methods, MARTINOTTI, **212**; Filing Microscopical Slides, HANCE, **142**.

Miscellaneous Methods and Technique.—Cell dissection, FRY, **109**; Manipulating small organisms, MURRAY, **231**; New form of needle, PAWLOWSKY, **247**; Living animals, VONWILLER, **327**; Vitro culture, STRANGEWAYS, **312, 313**; Photomicrography, HEADLAND, **149**; Use of polariscope, SCHMIDT, **292**; Terminology of Hydrobiology, FILIPJEV, **103**; Sea bottom investigations, PETERSEN, **252**; Determination of CO_2, BRUCE, **46**.

Extermination.—Yakovleff, **336**.

Publication Standards.—HAY, **148**.

MORPHOLOGY.

General Problems.—DORELLO, **87**; GREIL, **133**.

Skin-glands.—SCHAFFER, **291**.

Nervous system and sense organs.—Growth of nervous matter, LEVI, **199**; Changes in nervous elements, RIO-HORTEGA, **276**; Nissl-substance, HOPKINS, **170**; Pineal body, RIO-HORTEGA, **277**; Pituitary, DE BEER, **25**; Nerve-endings in mucles, KULCHITSKY, **188**.

Osteology.—Cytology of keratinization, LUDFORD, **203**; Problems of Vertebrate skull, DOMBROWSKI, **85**; KEIBEL, **180**; KINGSBURY & ADELMANN, **182**; VEIT, **325**; Mechanism of the limb-girdles, NAUCK, **232**; Torsion of the femur, ALTMANN, **6**.

Myology.—Shoulder-muscles, ROMER, **281**; Orientation of hind-limb, LATASTE, **193**; Muscle and tendon, SOBOTTA, **301**; Muscle and connective tissue, STUDNIČKA, **314**.

Genetal Organs.—Hormone of ovarian follicle, ALLEN & OTHERS, **4**; Yolk-cells, GOLGI, **129**; Placenta and other accessory organs, LANGE, **192**; Epididymis, REDENZ, **268**; Spermatogenesis, BOWEN, **40**; Acrosome of sperm, BOWEN, **39**.

Other Organs.—Heart-ventricles, SHANER, **297**; Sinus durae matris, GELDEREN, **118**; Arteries, BREMER, **44**; Blood cells, BÉTANCÉS, **629, 631**; GANDOLFO, **111**; Thyroid, MARCHLEWSKI & SKOWRON, **208**; Caecum, CORTI, **69**; Liver-tissue, TERNI, **319**; Mesenteries, FLEISCHMANN, **105**.

Cytology.—Textbook, DONCASTER, **86**; General, DUESBERG, **90**; PETER, **250**; Individualism problems, BRUNI, **47**; Structure and size, MARTINI, **210**; Cultivation of living tissue in vitro, BARTA, **18**; GARGANO, **113, 114**; of living cells, HERWERDEN, **157**; LEVI, **198**; The intracellular lumen, POCHE, **258**; Nuclear division, DROOGLEEVER, **88**; Mitosis, SPEK, **303**; Amitosis, BENNINGHOFF, **26**; Multi- and uninucleate cells, PRIORE, **264**; Mitochondria, WALLIN, **329**; Chondrosomes, BOUYGUES, **37**; Chromosomes, GATES, **116**; GIGLIO-TOS, **125**; Golgi apparatus BOWEN, **38**; BRAMBELL & GATENBY, **43**; MORELLE, **220**; PARAT & PAINLEVÉ, **241**; Cilia, LEMOS, **195**.

Protoplasm.—Structure MOULIN, **225**; SEIFRIZ, **295, 296**; Viscosity, PANTIN, **240**; Artificial, HERRERA, **155**.

Histology.—Epithelium, DANINI, **75**; HOEPKE, **165**; Connective tissue, BÉTANCÉS, **30**; Conjunctive tissue, GERARD, **120**; Striped Muscle, DIAMARE, **83**; Cristelline lens, BUSACCA, **50**.

Miscellaneous. — Morphology of luminescence, MORTARIA, **222**.

PALEONTOLOGY.

Palaenotology.—Geology and evolution, MATHER, **213**; Evolution of L. Palaeozoic Life, ELLES, **94**; Palaeontology and the species concept, TRUEMAN, **323**; Methods of fossilization, ROGERS, **280**; SAMOJLOFF, **289**; Palaeopathology, ABEL and OTHERS, **2**.

PHYSIOLOGY.

General Address.—A. V. HILL, **162**.

Nervous system and sense organs.—Invertebrate eye, HOMANN, **169**; Sense organs of aquatic animals, FRISCH, **108**; Growth of nervous matter, LEVI, **199**.

Nutrition.—Digestive glands, GROEBBELS, **136**; Extra-intestinal digestion, LENGERKEN, **196**; Starvation, PEARL, **248**; Caecum, CORTI, **69**.

Respiration.—Oxygen consumption in marine forms, BALDWIN, **17**; Respiration in aquatic animals, BRUCE, **46**; In cold-blooded animals, POTANIÉ, **261**.

Osteology.—Ossification, SACCHETTO, **286, 287**.

Reproduction.—Weight and volume, CHAMPY, **60**; Fertilization, GELLHORN, **119**; Sex determination, ARTOM, **14**; Change of sex, HARMS, **143**; The Hormone of the egg follicle, ALLEN and OTHERS, **4**; Function of the acrosome, BOWEN, **39**; Flocculation of the sperm, WALTON, **330**.

Secretion and Glands.—The endocrine organs, SHARPEY-SCHAFER, **298**; Secretion, VINCENT, **326**.

Movement. — Muscles, JOHANSSON, **176**; Cilia, GRAY, **132**; MERTON, **214**; PETERFI & WOERDEMANN, **251**.

Growth.—General, REED, **269**; GÜNTHER, **137**; RUBNER, **282**; Growth and symmetry, SWETT, **317**; LATASTE, **194**; Morphogenesis, LILLIE, **200**; Growth and puberty, CHAMPY, **61**; Balance and proportion, bipedal and quadripedal, BÖKER, **33**.

Miscellaneous.—Phototropic mechanism, BUDDENBROEK, **49**; Colour response, HOGBEN, **167**; Bioluminescense, MORTARIA, **222**; Temperature and fresh air, L. HILL, **163**; Old age and death, MÜHLMANN, **226**; RŮŽIČKA & OTHERS, **285**.

Experimental Physiology.—Artificial parthenogenesis, DALCQ, **73, 74**; Effects of cold, RAHM, **265**; Effect of poisons on mitosis, MAINX, **207**; Heart poisons, CARLSON, **55**; Pituitary injection, HOGBEN & HOBSON, **168**; Internal secretion, injection and metamorphosis, REMY, **271**; Effects of X-rays, ANCEL & VINTEMBERGER, **8**; PAULI & HARTMANN, **246**; Testicular grafts, FICI, **100**; MONARI, **218**; Catilage experiments, BENNINGHOFF, **27**.

Bio-Chemistry.—Protoplasm, HEILBRUNN, **151**; Fertilization and chemical action, DAKIN & FORDHAM, **72**; Ion action of blood, DUVAL, **92**; Chemotaxis of sperm, GATENBY, **115**; Distribution of chitin, SCHULZE, **294**; of iron, SCHNEIDER, **293**; Haemoglobin, ANSON & OTHERS, **13**; Osmotic pressure, CLEMENTI, **66**; Chemistry and genetics, MUNERATI, **227**.

EMBRYOLOGY.

General.—Textbook, MCEWEN, **206**; General Problems, GRÄPER, **131**; SPALTEHOLZ, **302**; Laws of growth, KINGSBURY, **181**; Chemistry and embryology, NEEDHAM, **235**; Phylogenesis and embryology, RUFFINI, **283**.

Early Stages.—DELLA VALLE, **80**; Dilation and contraction of the blastomeres, FADDA, **97**; The polar sulcus, FADDA & SCIACCHITANO, **98**.

Organogeny.—Neural tube and mesoderm, DART, **76**; Peripheral nerves, HARRISON, **145**; Inner ear, RANZI, **267**; Axial skeleton, HELD, **152**; Sinus durae matris, GELDEREN, **118**; Blood-cells, BÉTANCÉS, **31**; GANDOLFO, **111**; Muscle and tendon, RÉNYI, **272**; Spermatogenesis, BOWEN, **40**.

Experimental Embryology. — GIGLIOTOS, **123, 124, 125, 126, 127**; HUXLEY & OTHERS, **171**; Polarity and electric current, LUND, **204**; Adrenalin effects, KRIŽENECKÝ, **186**; Deficiency effects on vertebrate eye, STOCKHARD, **311**.

ETHOLOGY.

Ecology.—Definition of terms, RESWOY, **273**; Land-Vertebrates of N. America, HATT, **147**; Animal life at sea bottom, PETERSEN, **252, 253**.

Habitats.—Marine Plankton studies, DELAP, **79**; ISSEL, **172**; JESPERSEN, **174**; MURPHY, **230**; NIKITIN, **236**; GARDINER, **112**; Method of computing plankton, RISCH, **278**.

Limnology. — ADAMSTONE, **3**; ALSTERBERG, **5**; ANDRÉ, **10**; BAUER, **21**; BAYERSDOERFER, **22**; BISHOP & CLARKE, **32**; BORCA, **35**; GALTSOFF, **110**; JUDAY, **177**; MINKIEWICZ, **216**; MONARD, **217**; MURAVEISKI, **229**; NAUMANN, **233, 234**; OBERMAYER, **238**; PASQUINI, **244**; PESTA, **249**; RIIKOJA, **275**.

Other Habitat studies.—River plankton, MURAVINSKY, **228**; Polluted rivers, CARPENTER, **56**; Hot springs, BRUES, **45**; Peat-moors, HARNISCH, **144**; Caves, BOKOR, **34**; CAPRA, **54**.

Effects of environment.—Deserts, BUXTON, **51**; Growth on metal plates, PARKER, **243**; Hyperalcalized water, LABBÉ, **191**; Polluted water, TAUSON, **318**; CARPENTER, **56**; Volcanic eruptions, WALDAU, **328**; Temperature and fresh air, L. HILL, **163**.

Psychology.—ALVERDES, **7**; HERRICK, **156**.

AETIOLOGY.

Evolution.—General, DUERDEN, **89**; KRÍŽENECKÝ, **187**; PATTEN, **245**; A mathematical theory, HALDANE, **140**; YULE, **337**; Adaptive radiation, FABIANI, **96**; Geographical evolution, GRINNELL, **135**; Reversible evolution, HEWITT, **160**; Pathogenesis, JICKELI, **175**; Orthogenesis, STURTEVANT, **315**; Geological factors, MATHER, **213**; Inheritance of acquired characters, FOX, **106**; CUÉNOT, LIENHART & VERNIER, **71**; Adaptation to environment, THORPE, **322**; Variation in the embryo, PHILIPTSCHENKO, **254**.

Genetics and Mendelism.—General works, MACBRIDE, **205**; GUYENOT, **138**; Mendelism, ANON, **11**; REGAN, **270**; Genetics, general, FICK, **101**; Heredity and evolution, GETZENDANER, **121**; RIDDLE, **274**; Eugenics, HAGEDOORN, **139**; Genetics and sex problems, BORNER, **36**; PRELL, **262**, **263**; Inbreeding, BAESHNUNS-JESSEN, **16**; Size-inheritance, CASTLE, **57**.

Problems of Sex.—Sex determination, ARTOM, **14**; PARHON & MARZA, **242**; Change of sex, HARMS, **143**; Control of sex ratio, CRAW, **70**; Sex and hormones, CHAMPY, **59**; Secondary sexual characters, MOTTRAM, **224**; Hermaphroditism, HOEPKE, **166**.

Parasitism and Symbiosis.—BUCHNER, **48**; NUTTALL, **237**; WARD, **331**.

Pathology.—Vitalism and Pathology, FISCHER, **104**; Vertebrate pathology in Zoological Gardens, LUCAS, **201**; Palaeopathology, ABEL & OTHERS, **2**.

Teratology.—WITSCHI, **335**.

Phylogeny.—General, BOWER, **41**; Phylogeny and embryology, RUFFINI, **283**; Of the Vertebrates, DELSMAN, **81**; PLATE, **257**; Of air-breathing Vertebrates, PIKE, **255**; Lower Palaeozoic life, ELLES, **94**; Placenta of the Amniota, LANGE, **192**; Of the sense of pain, ZIEGLER, **339**.

Taxonomy. — General problem, SMIRNOV, **300**; In palaeontology, TRUEMAN, **323**; Fixed specific characters, COOK, **68**; Stablity of subspecific characters, SUMNER, **316**; Classification of the A. K., HICKSON, **161**.

Nomenclature.—General Principles, ZIEGLER, **340**; POLLACCI, **259**; Historical notes, STEJNEGER, **307**; Law of priority, WATSON, **332**; Binary and Binomial, BATHER, **20**; General methods, ABDERHALDEN, **1**; List of proposed fixed generic names, STILES, **310**; Index nominum, SHERBORN, **299**; Popular names in Mexico, CONTRERAS, **67**.

GEOGRAPHY AND FAUNAS.

General Problems. — Geographical distribution, HESSE, **158**; THACKER, **320**; Wagener's theory, UBISCH, **324**; Willis' theory, CHAMBERLIN, **58**; Bipolar distribution, BERG, **28**; Pacific land-bridges, MARCUS, **209**; Origin of S. African fauna, HEWITT, **159**; The Ice-age in Turkestan and its effects, KUSNEZOV, **190**; Ancient and recent marine faunas, CLARK, **64**; Ecology and evolution, GRINNELL, **135**; Problems of terrestrial Invertebrates, FILIPJEV, **102**; Fluctuations in abundance, ELTON, **95**.

Palaearctic Region.—Wales, CARPENTER, **56**; Ireland, DELAP, **79**; Bavaria, STADLER, **305**; Switzerland, ANDRE, **10**; BAYERSDOERFER, **22**; MONARD, **217**; OBERMAYER, **238**; PESTA, **249**; Hungary, BOKOR, **34**; Rumania, BORCA, **35**; LEON, **197**; Poland, MINKIEWICZ, **216**; PONGRÀCZ, **260**; Esthonia, RIIKOJA, **275**; Russia, MURAVEISKI, **228**, **229**; Italy, CAPRA, **54**; PASQUINI, **244**; Cirenaica, GHIGI, **122**; Egypt (Suez Canal), GARDINER, **112**; Turkestan, KUSNEZOV, **190**.

Ethiopian Region.—South Africa, HEWITT, **159**.

Australian Region.—Kei Islands, MORTENSEN, **223**; New Zealand, THOMSON, **321**.

Neotropical Region.—Falkland Is., BOYSON, **42**.

Neartic Region. — United States, GALTSOFF, **110**; California, MURPHY, **230**; Idaho, BRUES, **45**; Michigan, HATT, **147**; Wisconsin, JUDAY, **177**; Maine, BISHOP & CLARKE, **32**; Canada, ADAMSTONE, **3**.

Oceans and Seas.—Arctic seas, DERJUGIN, **82**; MESSJATZEV, **215**; GRIEG, **134**; North Sea, PETERSEN, **253**; N. Atlantic, DOLLFUS, **84**; E. Atlantic and Mediterranean, JESPERSEN, **174**; Black Sea, KNIPOWITSCH, **183**; NIKITIN, **236**; S. African seas, GILCHRIST, **128**.

Extinct faunas.—Post-tertiary Ceskoslavia, ZELIZKO, **338**.

II. PROTOZOA

ARRANGED BY

H. M. WOODCOCK, D.Sc. (Lond.)

CONTENTS

	PAGE
I. Titles	2
II. Subject Index :—	
Comprehensive and General	19
Structure	19
Physiology	20
Development and reproduction	20
Ethology	20
Variation, Phylogeny	21
Distribution, Geography	21
III. Systematic :—	
1. Mycetozoa [vacant].	
2. Sarcodina	21
3. Sporozoa	25
4. Mastigophora	27
5. Ciliophora	30
Protozoa incertae sedis [vacant].	

I.—TITLES.

Adam, D. I. *vide* Mackinnon, D. L.

1.—Adelheim, R. Ueber leishmaniosis infantum et canina in Riga. Arch. Schiffs. Tropenhyg. Leipzig **28** 1924 pp. 367–387.

2.—Adie, H. The sporogony of *Haemoproteus columbae.* Bull. Soc. Path. exot. Paris **17** 1924 pp. 605–613 2 pls.

3.—Adler, S. An *Isospora* of civet-cats. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 87–94 pl. v.

4.—Adler, S. A note on *Plasmodium agamae* (Wenyon, 1908). Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 131–133.

Adler, S. *vide* Blacklock, B.

Alcock, W. B. *vide* Wenyon, C. M.

5.—Alexeieff, A. Comparaison entre la structure des spermatozoides et celle des Flagellés. Arch. Protistenkunde Jena **49** 1924 pp. 104–111.

6.—Allison, R. V. The density of unicellular organisms. Ann. appl. Biol. Cambridge **11** 1924 pp. 153–168.

7.—Anderson, C. Note concernant la toxoplasmose du Gondi. Bull. Soc. Path. exot. Paris **17** 1924 pp. 354 & 355.

Anderson, C. *vide* Nicolle, C.

8.—André, E. Note sur quelques ectoparasites de l'ecrevisse. Rev. Suisse Zool. Genève **31** 1924 pp. 351 & 352.

9.—Archibald, R. G. and **Susu,** B. A Sporozoon from the spleen of a case of splenomegaly in the Sudan. Trans. R. Soc. trop. Med. London **17** 1924 pp. 482–484 2 pls.

10.—Arndt, A. Rhizopodenstudien. —I. Arch. Protistenkunde Jena **49** 1924 pp. 1–83 pls. i–v.

11.—Ashworth, J. H. Modern Zoology : some of its developments and its bearings on human welfare. Rep. Brit. Ass. London **91** for 1923, 1924 pp. 108–125.

12.—Astre, G. Étude paléontologique des Nummulites du Crétacé supérieur de Cézan-Lavardens (Gers) [*Nummulites mengaudi* n. sp.]. Bull. Soc. Géol. France Paris sér. 4 **23** 1924 pp. 360–368 pl. xii.

Aubertot, M. *vide* Chatton, E.

13.—Bach, F. W. Weitere Untersuchungen über die Verbreitung parasitischer Darmprotozoenarten des Menschen innerhalb Deutschlands. Arch. Schiffs. Tropenhyg. Leipzig **28** 1924 pp. 428–443.

14.—Barrow, J. V. A clinical study of the intestinal Protozoa, based on seven hundred and twenty-five cases. Amer. J. Trop. Med. Baltimore **4** 1924 pp. 23–32.

15.—Battaglia, M. Ueber Infektion mit einigen menschlichen und tierischen Protozoen. Centralbl. Bakt. Jena Abt. 1 **92** 1924 Orig. pp. 540–542.

16.—Bédier, E. Piroplasme de la mangouste d'Afrique *Herpestes galera* Erxleben. C.R. Soc. Biol. Paris **90** 1924 pp. 415–417.

17.—Beers, C. D. Observations on *Amoeba* feeding on the Ciliate *Frontonia.* Brit. J. exp. Biol. Edinburgh **1** 1924 pp. 335–341.

18.—Bělář, K. Untersuchungen an *Actinophrys sol* Ehrenberg. II. Beiträge zur Physiologie des Formwechsels. Arch. Protistenkunde Jena **48** 1924 pp. 371–435 pls. xiv & xv.

19.—Bercovitz, N. Viability of cysts of human intestinal Amoebas as determined by exposure to various substances and subsequent staining in haematoxylin. Univ. Calif. Publ. Zool. Berkeley **26** 1924 pp. 249–261.

20.—Berlin, H. Untersuchungen über Monocystideen in den vesiculae seminales der schwedischen Oligochaeten. Arch. Protistenkunde Jena **48** 1924 pp. 1–124 pls. i–vi.

21.—Bhatia, B. L. Preliminary note on the mode of infection of earthworms by Monocystid parasites. J. R. Microsc. Soc. London **1924** pp. 187–189.

22.—Bhatia, B. L. The genus *Stomatophora* Drzewecki. Q. J. microsc. Sci. London **68** 1924 pp. 481–512 pl. xxiii.

23.—Bhatia, B. L. and **Setna,** S. On some new cephaline Gregarines. Parasitol. Cambridge **16** 1924 pp. 279–288 23 text-figs.

24.—Bills, C. E. Some effects of the lower alcohols on *Paramoecium*. Biol. Bull. Wood's Hole **47** 1924 pp. 253–264.

Bizard, E. *vide* Logé, —.

25.—Blacklock, B. and **Adler,** S. A malarial parasite of the chimpanzee. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 1–2.

26.—Boeck, W. C. Studies on *Tricercomonas intestinalis* (Wenyon and O'Connor, 1917). Amer. J. Trop. Med. Baltimore **4** 1924 pp. 519–535 1 pl.

27.—Bozler, E. Ueber die Morphologie der Ernährungsorganelle und die Physiologie der Nahrungsaufnahme bei *Paramoecium caudatum* Ehrb. Arch. Protistenkunde Jena **49** 1924 pp. 163–215 pl. viii.

28.—Bray, A. W. Note on a Protozoon from the gill-chambers of *Bankia* (*Xylotrya*) *gouldi*. Trans. Amer. Microsc. Soc. Menasha Wis. **43** 1924 pp. 172 & 173.

29.—Bresslau, E. Neues über das Tektin. Verh. D. zool. Ges. Berlin **29** 1924 pp. 91–95.

30.—Bresslau, E. and **Scremin,** L. Die Kerne der Trypanosomen und ihr Verhalten zur Nuclealreaktion. Arch. Protistenkunde Jena **48** 1924 pp. 509–515 pl. xxi.

31.—Bruce, D. Prevention of disease. Science New York N.S. **60** 1924 pp. 109–124.

32.—Brumpt, E. Description d'une nouvelle espèce de Trypanosome, *Trypanosoma crocidurae* chez une musaraigne (*Crocidura russulus*). Ann. Parasitol. Paris **1** 1923 pp. 262–264 2 text-figs.

33.—Brumpt, E. Description de deux Trypanosomes nouveaux : *T. sergenti* et *T. parroti* du *Discoglossus pictus*. Ann. Parasitol. Paris **1** 1923 pp. 337–341 2 text-figs.

34.—Brumpt, E. Le *Trypanosoma rhodesiense*. Faits et hypothèses concernant son individualité. Ann. Parasitol. Paris **2** 1924 pp. 254–273 3 text-figs.

35.—Brumpt, E. Les Piroplasmes des Bovidés. I. Les Theileries. Ann. Parasitol. Paris **2** 1924 pp. 340–353.

36.—Brumpt, E. et **Lavier,** G. Un nouvel Euglénien polyflagellé parasite du têtard de *Leptodactylus ocellatus* au Brésil. Ann. Parasitol. Paris **2** pp. 248–252 2 text-figs.

37.—Buisson, J. Quelques Infusoires parasites d'Antilopes africaines. Ann. Parasitol. Paris **2** 1924 pp. 155–160 10 text-figs.

38.—Cameron, G. C. and **Maitland,** H. B. A description of parasites in spontaneous encephalitis of rabbits. Journ. Path. Bact. Edinburgh **27** 1924 pp. 329–333.

39.—Carini, A. Sur une *Grahamella* : *Grahamella acodoni* n. sp., trouvée dans le sang de *Acodon serrensis*. Ann. Parasitol. Paris **2** 1924 p. 253.

40.—Catanei, A. Essai critique sur la morphologie des parasites du paludisme. Arch. Inst. Pasteur Alger **1** 1923 pp. 10–108 pls. i–iii.

41.—Catanei, A. Etude expérimentale de l'association de la Spirochétose et du paludisme des oiseaux. Bull. Soc. Path. exot. Paris **17** 1924 pp. 535–538.

Catanei, A. *vide* Sergent, Et.

42.—Cépède, C. *Mrazekia piscicola* n. sp., Microsporidie parasite du merlan (*Gadus merlangus* Linné). Bull. Soc. Zool. France Paris **49** 1924 pp. 109–113.

43.—Chagas, C. Infection naturelle des singes du Para (*Chrysothrix sciureus* L.) par *Trypanosoma cruzi*. C.R. Soc. Biol. Paris **90** 1924 pp. 873–876 4 text-figs.

44.—Chagas, C. Fécondation de la *Prowazekia cruzi*. C.R. Soc. Biol. Paris **91** 1924 pp. 988–990 11 text-figs.

45.—Chapman, F. On some Foraminifera and Ostracoda from the Cretaceous of Umzamba River, Pondoland. Trans. Geol. Soc. S. Africa Johannesburg **26** 1923 pp. 1–6.

46.—Chatton, E. Sur un *Leptomonas* d'un Nématode marin et la question de l'origine des Trypanosomides. C.R. Soc. Biol. Paris **90** 1924 pp. 780–783.

47.—Chatton, E. Sur les connexions flagellaires des éléments flagellés. Centrosomes et mastigosomes. La cinétide, unité cinéto-flagellaire. Cinétides simples et cinétides composées. C.R. Soc. biol. Paris **91** 1924 pp. 577–580.

48.—Chatton, E. et **Aubertot,** M. Sur les phases et les voies d'extension des infections à *Leptomonas* intestinaux des Drosophiles. La non spécificité parasitaire du *Leptomonas drosophilae*. C.R. Soc. biol. Paris **91** 1924 pp. 283–286.

49.—Chatton, E. et **Lwoff,** A. Sur un Infusoire marin astome: *Spirophrya subparasitica* n.g., n. sp., à deux hôtes, Copépode et Hydraire. C.R. Acad. Sci. Paris **178** 1924 pp. 1642–1644.

50.—Chatton, E. et **Lwoff,** A. Sur l'évolution des Infusoires des Lamellibranches; morphologie comparée des Hypocomidés. Les nouveaux genres *Hypocomina* et *Hypocomella*. C.R. Acad. Sci. Paris **178** 1924 pp. 1928–1930.

51.—Chatton, E. et **Lwoff,** A. Un Protéomyxé, *Cinetidomyxa nucleoflagellata* n.g., n. sp., à cinétide intracytoplasmique et sa multiplication. C.R. Soc. biol. Paris **91** 1924 pp. 584–588 6 text-figs.

52.—Chatton, E. et **Pérard,** C. *Collinina* nom. nov. pour *Collinella* Chatt. et Pérard 1919 (Cilié) nec O. Schmidt 1879 (Spongiaire). Bull. Soc. Zool. France Paris **49** 1924 p. 347.

53.—Chatton, E. et **Weill,** R. Sur l'appareil flagellaire des Péridiniens et en particulier du *Polykrikos schwartzi* et ses relations avec l'appareil nucléaire. C.R. Soc. biol. Paris **91** 1924 pp. 580–583.

54.—Checchia-Rispoli, G. Sulla distribuzione stratigraphica delle Miogypsine. Boll. R. Uff. geol. Ital. Roma **49** 1923 No. 6 pp. 1–3.

55.—Checchia-Rispoli, G. Sulla "*Nummulites molli* d'Archiac" dell' Eocene del Promontorio garganico. Boll. R. Uff. geol. Ital. Roma **49** No. 7 1923 pp. 1–8.

56.—Cleveland, L. R. The physiological and symbiotic relationships between the intestinal Protozoa of Termites and their host, with special reference to *Reticulotermes flavipes* Kollar. Biol. Bull. Wood's Hole **46** 1924 pp. 178–227.

57.—Clodius, G. Die Foraminiferen des obermiozänen Glimmertons in Norddeutschland mit besonderer Berücksichtigung der Aufschlüsse in Mecklenburg. Arch. Ver. Natg. Mecklenburg Güstrow **75** 1922 pp. 76–145 1 pl.

58.—Cowdry, E. V. and **Nicholson,** F. M. The co-existence of Protozoan-like parasites and meningoencephalitis in mice. J. exp. Med. New York **40** 1924 pp. 51–62 pls. iii & iv.

59.—Cunha, A. M. da et **Torres,** C. de M. Sur un nouveau *Globidium, Gl. tatusi* Cunha e Torres 1923, parasite de l'Armadille. C.R. Soc. Biol. Paris **90** 1924 p. 242.

60.—Cunningham, B. and **Hearne,** C. Some observations upon the reproductive rate of *Euglena tripteris* and *Eudorina*. J. Elisha Mitchell Sci. Soc **40** 1924 pp. 185–188 pls. xxxii–xxxvi.

61.—Cushman, J. A. The Foraminifera of the Atlantic Ocean. Part 5. *Chilostomellidae* and *Globigerinidae*. Bull. U. S. Nat. Mus. Washington **104** 1924 pp. 1–53 pls. i–viii.

62.—Cushman, J. A. A new genus of Eocene Foraminifera. Proc. U. S. Nat. Mus. Washington **66** Art. 30 1924 pp. 1–4 pls. i & ii.

63.—Cushman, J. A. The Foraminifera of the Vicksburg group. Prof. Pap. U. S. Geol. Surv. Washington **133** 1923 pp. 11–71 8 pls.

Cutler, D. W. *vide* Sandon, H.

64.—Danisch, F. Balantidiencolitis kombiniert mit typhus abdominalis. Bemerkungen zur Biologie und pathogenen Bedeutung des *Balantidium coli*. Centralbl. Bakt. Jena Abt. 1 **92** 1924 Orig. pp. 104–115 4 text-figs.

Davies, A. M. *vide* Wayland, E. J.

65.—Davis, H. S. A new Myxosporidian parasite, the cause of "Wormy" Halibut. Rept. U. S. Comm. Fish. Washington **1923** (1924) Appendix VIII 5 pp.

66.—**Davis,** N. C. and **Reich,** W. W. Notes on coccidial oöcysts from domestic animals in California. J. Parasitol. Urbana **10** 1924 pp. 137–146 pl. xix.

67.—**Dekester,** M. et **Melnotte,** P. Au sujet de la fréquence dans les selles diarrhéiques au Maroc des *Trichomonas* et autres Protozoaires. Bull. Soc. Path. exot. Paris **17** 1924 pp. 301 & 302.

68.—**Delanoë,** P. De la fréquence des *Trichomonas* dans les selles diarrhéiques au Maroc. Bull. Soc. Path. exot. Paris **17** 1924 pp. 128 & 129.

69.—**Delanoë,** P. Au sujet des dysenteries à *Trichomonas*. (Réponse à MM. Dekester et Melnotte.) Bull. Soc. Path. exot. Paris **17** 1924 pp. 557 & 558.

70.—**Descazeaux,** J. L'anaplasmose au Chili. Bull. Soc. Path. exot. Paris **17** 1924 pp. 639–642.

71.—**Deschiens,** R. Variations tinctoriales et métabolisme de l'amidon chez *Giardia*. Bull. Soc. Path. exot. Paris **17** 1924 pp. 889–894.

72.—**Dios,** R. L. and **Zuccarini,** J. A. Première constatation de la trypanosomiase bovine en République Argentine. C.R. Soc. biol. Paris **91** 1924 pp. 23 & 24.

73.—**Dollfus,** R. P. Contribution à la faune des Invertébrés du banc de Rockall. (Matériaux récoltés par M. G. Hamel pendant la croisière du Pourquoi-Pas ? sous le Commandement du Dr. J. B. Charcot). Bul. Inst. Océan Monaco **438** 1924 pp. 1–25. [Foraminifera determined by **Heron-Allen** and **Earland.**]

74.—**Donatien,** A., **Lestoquard,** F. et **Sausseau,** L. Piroplasmes trouvés dans un cas de jaunisse des muletons du Poitou. C.R. Soc. Biol. Paris **90** 1924 pp. 1308–1310 1 text-fig.

75.—**Donatien,** A. et **Salord,** C. Inoculation expérimentale de *Trypanosoma berberum* à l'âne. Bull. Soc. Path. exot. Paris **17** 1924 pp. 887 & 888.

Donatien, A. *vide* Sergent, Ed.

76.—**Douvillé,** H. Les Orbitoides et leur evolution en Amérique. Bull. Soc. géol. France Paris sér. 4 **23** 1924 pp. 369–376 pl. xiii.

77.—**Douvillé,** H. Les premières Nummulites dans l'Eocène du Béarn. C.R. Acad. Sci. Paris **178** 1924 pp. 36–41 14 text-figs.

78.—**Douvillé,** H. Orbitoidés de la Jamaique. *Pseudorbitoides trechmanni* nov. gen., nov. sp. C.R. Soc. géol. France Paris **1922** pp. 203 & 204.

79.—**Drbohlav,** J. J. The cultivation of the Protozöon of blackhead. J. med. Research Boston **44** 1924 p. 677.

80.—**Dschunkovsky,** E. and **Urodschevich,** V. Theileriasis in goats, sheep and cattle, with a description of *Theileria hirci* n. sp. from Serbia. Parasitol. Cambridge **16** 1924 pp. 107–110.

81.—**Duboscq,** O. et **Grassé,** P. Notes sur les Protistes parasites des Termites de France. I. *Trichomonas trypanoides* n. sp. C.R. Soc. Biol. Paris **90** 1924 pp. 547–550 5 text-figs.

82.—**Duboscq,** O. et **Grassé,** P. Notes sur les Protistes parasites des Termites de France. Sur l'évolution de *Janickiella grassii* Dub. et Gras. C.R. Soc. Biol. Paris **90** 1924 pp. 1442–1445 10 text-figs.

83.—**Duke,** H. L. Polymorphic Trypanosomes of the *T. brucei* group recovered from the Mwanza sleeping-sickness area. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 415–435.

84.—**Duke** H. L. Further observations on the effects of direct transmission on Trypanosomes. Parasitol. Cambridge **16** 1924 pp. 251–254.

Earland, A. *vide* Heron-Allen, E.

85.—**Eckstein,** F. Zur Entdeckungsgeschichte der Malaria. Zool. Anz. Leipzig **58** 1924 pp. 83–97 137–148 213–227.

86.—**Edwards,** J. G. The action of certain reagents on amoeboid movement. II.—Locomotor and physiological reactions. Brit. J. exper. Biol. Edinburgh **1** 1924 pp. 571–595 1 pl.

87.—**Efimoff,** W. W. Ueber Ausfrieren und Ueberkältung der Protozoen. Arch. Protistenkunde Jena **49** 1924 pp. 431–446.

88.—**Epstein,** H. Weiterer Beitrag zur Blut- und Blutprotozoenfärbung (Toluidinblau-Eosin). Centralbl. Bakt. Jena Abt. 1 **92** 1924 Orig. pp. 148–150.

89.—Escomel, E. Essai sur la parasitologie d'Aréquipa (Pérou) et de ses environs. Bull. Soc. Path. exot. Paris **17** 1924 pp. 906–925 32 figs.

90.—Fano, C. da. Protozoan-like parasites in spontaneous encephalitis of rabbits. J. Path. Bact. Edinburgh **27** 1924 pp. 333–336 pls. xxvi & xxvii.

91.—Fantham, H. B. Some Protozoa found in soils in South Africa. Trans. R. Soc. S. Africa Cape Town **12** 1924 pp. 109 & 110.

92.—Fantham, H. B. Animal parasites. Trans. R. Soc. S. Africa Cape Town **12** 1924 pp. cxviii & cxix.

93.—Fantham, H. B. and **Porter,** A. On *Herpetomonas denticis*, a parasitic Flagellate found in the blood of the silver-fish *Dentex argyrozona*. Trans. R. Soc. S. Africa Cape Town **12** 1924 p. lxi & lxii.

Farber, W. P. *vide* Taylor, C. V.

94.—Farkas, B. Beiträge zur Kenntnis der Suctorien. Arch. Protistenkunde Jena **48** 1924 pp. 125–135 pl. vii.

95.—Faust, E. C. Observations on North China intestinal parasites of man. Amer. J. trop. Med. Baltimore **4** 1924 pp. 411–437.

96.—Foa, A. Sul ciclo morfologico e biologico del *Nosema bombycis* Nägeli. Atti R. Accad. Lincei Roma Ser. 5 **33** 1924 i pp. 97–100.

97.—Foley, H. et **Parrot,** L. Technique de l'examen microscopique du sang. Arch. Inst. Pasteur Alger **1** 1923 pp. 279–290.

98.—Fortner, H. Ueber die physiologisch differente Bedeutung der contraktilen Vakuolen bei *Paramoecium caudatum* Ehrenb. Zool. Anz. Leipzig **60** 1924 pp. 217–231.

99.—Fossa-Mancini, E. Rocce fossilifere eoceniche, o di aspetto eocenico, del Ladak (campioni raccolti dalla Spedizione Italiana nell'Asia centrale 1913–1914). Atti R. Acad. Lincei Roma Ser. 5 **33** i 1924 pp. 305–309.

100.—Franchini, G. Observations sur les Hématozoaires des oiseaux d'Italie. Ann. Inst. Pasteur Paris **38** 1924 pp. 470–515 many text-figs.

101.—Franchini, G. Sur des cultures très anciennes de Flagellés. Bull. Soc. Path. exot. Paris **17** 1924 pp. 32–35.

102.—Franchini, G. Piroplasmose chez un petit loir (*Myoxus avellanarius*). Bull. Soc. Path. exot. Paris **17** 1924 pp. 881–884 12 text-figs.

103.—Franchini, G. Hématozoaires particuliers d'un oiseau (*Hypolais hypolais*). Bull. Soc. Path. exot. Paris **17** 1924 pp. 884 & 885.

104.—François-Pérey, J. Influence de la lumière solaire sur le développement d'un Protozoaire du sol *Colpoda cucullus*. C.R. Acad. Sci. Paris **179** 1924 pp. 232–234.

105.—Galiano, E. F. La ley del "todo o nada" aplicada al arrolliamiento del pedunculo de *Vorticella*. Bol. Soc. Esp. Hist. nat. Madrid **24** 1924 pp. 33–45.

106.—Gard, M. M. Recherches sur une nouvelle espèce d'Euglène (*Euglena limosa* nov. spec.). Bull. Soc. Bot. France **69** 1922 pp. 184–196 241–250 306–313.

107.—Gayewskaya, N. S. (On the question of the function of pulsating and non-pulsating vacuoles of salt-water Infusoria.) [Russian, with English summary.] Russ. Hydrobiol. Zeits. Saratow **3** No. 11–12 1924 pp. 239–252.

108.—Gedroyc, M. de. Les prototoxins préparées à l'aide des Protozoaires vivant à l'état libre (Infusoires ciliés) et leur importance au point de vue de la biologie générale. C.R. Soc. Biol. Paris **90** 1924 pp. 905 & 906.

109.—Gedroyc, M. de. Les Protozoaires agents immunisants contre les maladies contagieuses. C.R. Soc. Biol. Paris **90** 1924 pp. 907 & 908.

110.—Georgevitch, J. Essai d'un cycle évolutif général chez les Myxosporidies. C.R. Soc. Biol. Paris **90** 1924 pp. 1085–1087.

111.—Georgevitch, J. Nouvelles vues sur le cycle de développement des Myxosporidies. Ghlas Srpske Akad. Beoghrad **107** 1923 pp. 35–60 11 text-figs. [In Serbian.]

112.—Giemsa, G. Zur Praxis der Giemsa-färbung. Centralbl. Bakt. Abt. 1 **91** 1924 Orig. pp. 343–346.

113.—Gilchrist, J. D. A protozoal parasite (*Chloromyxum thyrsites* sp. n.) of the Cape fish, the "snoek" (*Thyrsites atun* Euphr.). Trans. R. Soc. S. Africa Cape Town **11** 1923 pp. 263–273 7 text-figs.

114.—Gilchrist, J. D. Note on a disease in the snoek (*Thyrsites atun*). Trans. R. Soc. S. Africa Cape Town **12** 1924 p. xl.

Gordon, R. M. *vide* Stephens, J. W.

115.—Grassé, P. P. *Octomastix parvus* Alex. Diplozoaire parasite de la Cistude d'Europe. C.R. Soc. Biol. Paris **91** 1924 pp. 439–442 8 text-figs.

Grassé, P. *vide* Duboscq, O.

116.—Grassi, B. Sulla trasmissione dalla malaria. Atti R. Accad. Lincei Roma Ser. 5 **33** i 1924 pp. 373–376.

117.—Grassi, B. Nach fünfundzwanzig Jahren. Chronologische Uebersicht der Entdeckung der menschlichen Malariaübertragung. Centralbl. Bakt. Jena Abt. 1 **92** 1924 Orig. pp. 392–397.

118.—Grassi, B. The transmission of human malaria. Nature London **113** 1924 pp. 304–307.

119.—Grassi, B. Twenty-five years after. A chronicle of the discoveries relating to the mode of transmission of human malaria. Parasitol. Cambridge **16** 1924 pp. 355–364.

Gueidon, E. *vide* Catanei, A.

Gupta, B. M. das *vide* Knowles, R.

120.—Guyénot, E. et **Naville,** A. *Glugea encyclometrae* n. sp. et *G. ghigii* n. sp., parasites de Platodes et leur développement dans l'hôte vertebré (*Tropidonotus natrix* L.). Rev. Suisse Zool. Genève **31** 1924 pp. 75–115 pls. ii & iii (erratum p. 175).

121.—Hanna, G. D. Some Eocene Foraminifera near Vacaville, California. Univ. Calif. Publ. Geol. Berkeley **14** 1923 pp. 319–328 pls. lviii & lix.

Hanzawa, S. *vide* Yabe, H.

122.—Harnisch, O. Studien zur Oekologie der Moorfauna. Biol. Centralbl. Leipzig **44** 1924 pp. 110–127.

123.—Hartmann, M. Ueber die Veränderung der Koloniebildung von *Eudorina elegans* und *Gonium pectorale* unter dem Einfluss äusserer Bedingungen. IV. Mitt. der Untersuchungen über die Morphologie und Physiologie des Formwechsels der Phytomonadinen (Volvocales). Arch. Protistenkunde Jena **49** 1924 pp. 375–395 pls. xii–xv.

124.—Hartmann, M. Der Ersatz der Fortpflanzung von Amöben durch fortgesetzte Regeneration. Weitere Versuche zum Todproblem. Arch. Protistenkunde Jena **49** 1924 pp. 447–464.

125.—Hayasaka, I. On the fauna of the Anthracolithic limestone of Omi-Mura in the western part of Echigo. Sci. Rep. Tohoku Imp. Univ. Sendai Ser. Geol. **8** 1924 pp. 1–83 pls. i–vii.

126.—Hayes, C. Nutritive spheres in *Amoeba*. Q. J. Microsc. Sci. London **69** 1924 pp. 144–149.

Hearne, C. *vide* Cunningham, B.

127.—Hegner, R. W. Some investigations on entozoic Protozoa. Amer. Nat. Lancaster Pa. **58** 1924 pp. 5–23.

128.—Hegner, R. W. *Giardia* and *Chilomastix* from monkeys, *Giardia* from the wild cat and *Balantidium* from the sheep. J. Parasitol. Urbana **11** pp. 75–78.

129.—Hegner, R. W. Medical Zoology and human welfare. Science New York, N.S. **60** 1924 pp. 551–558.

130.—Hegner, R. The mass-relations of cytoplasm and chromatin and their bearing on nuclear division and growth. Scientia Bologna ser. 2 **35** 1924 pp. 407–414.

131.—Heim, A. Das Problem der Kreide-Nummuliten in Ostschweiz und Vorarlberg. Geol. Rundsch. Berlin **15** 1924 pp. 223–226.

132.—Hentschel, C. C. On a new Ciliate, *Cryptochilum boreale* nov. sp., from the intestine of *Echinus esculentus* Linn., together with some notes on the Ciliates of Echinoids. Parasitol. Cambridge **16** 1924 pp. 321–328 3 text-figs.

133.—Herdman, E. C. Notes on Dinoflagellates and other organisms causing discolouration of the sand at Port Erin. III & IV. Proc. Trans. Liverpool Biol. Soc. **38** 1924 pp. 58–63 7 text-figs.; 75–84 45 figs.

134. Heron-Allen, E. and **Earland,** A. The Foraminifera of Lord Howe Island, South Pacific. J. Linn. Soc. Zool. **35** 1924 pp. 599–647 pls. xxxv–xxxvii.

135.—Heron-Allen, E. and **Earland,** A. The Miocene Foraminifera of the "Filter Quarry," Moorabool River, Victoria, Australia. J. R. Microsc. Soc. London **1924** pp. 121–186 pls. vii–xiv.

Heron-Allen, E. and **Earland,** A. *vide* Dollfus, R. P.

136.—Hirschler, J. Sur les composants lipoidifères du plasma des Protozoaires. C.R. Soc. Biol. Paris **90** 1924 pp. 891–893.

137.—Hoare, C. A. A note on the specific name of the Herpetomonad of the house-fly. Trans. R. Soc. trop. Med. London **17** 1924 pp. 403–406.

138.—Hoare, C. A. *Hepatozoon adiei* n. sp., a blood parasite of an Indian eagle. Trans. R. Soc. trop. Med. London **18** 1924 pp. 63–66 1 pl.

139.—Hovasse, R. "Zooxanthella chattoni" (*Endodinium chattoni*). Bull. biol. France Belg. Paris **58** 1924 pp. 38–48.

140.—Hovasse, R. Sur les Péridiniens parasites des Radiolaires coloniaux. Bull. Soc. Zool. France Paris **48** 1924 p. 337.

141.—Hovasse, R. *Trypanoplasma sagittae* sp. nov. C.R. Soc. biol. Paris **91** 1924 pp. 1254 & 1255.

142.—Howland, R. B. On excretion of nitrogenous waste as a function of the contractile vacuole. J. exp. Zool. Philadelphia **40** 1924 pp. 231–250.

143.—Howland, R. B. Experiments on the contractile vacuole of *Amoeba verrucosa* and *Paramoecium caudatum.* J. exp. Zool. Philadelphia **40** 1924 pp. 251–262

144.—Howland, R. B. Dissection of the pellicle of *Amoeba verrucosa.* J. exp. Zool. Philadelphia **40** 1924 pp. 263–270.

145.—Innocenti, G. D. Fossili eocenici dell'Istria. Atti R. Accad. Lincei Roma ser. 5 **33** i 1924 pp. 298 & 299.

146.—Ivanić, M. Ueber die promitotische Teilung des Synkaryons der Exconjuganten von *Chilodon cucullus* (O.F.M.). Arch. Protistenkunde Jena **49** 1924 pp. 297–300 4 text-figs.

147.—Jegen, G. Die protozoäre Parasitenfauna der Stechfliege, *Stomoxys calcitrans.* Ein Beitrag zur Erforschung parasitischer Protozoen in den blutsaugenden Insekten. Zool. Jahrb. Jena Abt. Anat. **46** 1924 pp. 389–472 pls. vi–xv.

Jeljaskowa, M. *vide* Popoff, M.

148.—Jollos, V. Untersuchungen über Variabilität und Vererbung bei Arcellen. Arch. Protistenkunde Jena **49** 1924 pp. 307–374 pls. x & xi.

149.—Jollos, V. Untersuchungen über Variabilität und Vererbung bei Arcellen. Biol. Centralbl. Leipzig **44** 1924 pp. 194–207.

150.—Joyet-Lavergne, P. L'appareil de Golgi dans la gamogonie de la Coccidie *Aggregata eberthi.* C.R. Acad. Sci. Paris **178** 1924 pp. 136–139.

151.—Joyet-Lavergne, P. Sur l'évolution des éléments cytoplasmiques dans le cycle d'une Aggrégatidée (*Aggregata eberthi* Labbé). C.R. Acad. Sci. Paris **178** 1924 pp. 2200–2202.

152.—Joyet-Lavergne, P. Les caractères cytoplasmiques de la sexualité dans les Gregarines. C.R. Acad. Sci. Paris **179** 1924 pp. 1212–1215.

153.—Joyet-Lavergne, P. L'appareil de Golgi dans les schizozoites d'un Aggrégatidé. C.R. Soc. Biol. Paris **90** 1924 pp. 680 & 681 9 text-figs.

154.—Joyet-Lavergne, P. Sur quelques caractères cytoplasmiques de l'anisogamie dans les sporadins des Grégarines. C.R. Soc. Biol. Paris **90** 1924 pp. 1220–1222.

155.—Joyet-Lavergne, P. Sur l'appareil de Golgi des Sporozoaires. C.R. Soc. biol. Paris **91** 1924 pp. 995–997.

156.—Kaas, P. G. Procedimento per lo studio della struttura interna degli Infusorii. Atti Pont. Accad. Nuovi Lincei Roma **73** 1920 pp. 210 & 211.

157.—Kaas, P. G. Communicazione intorno ad una nuova specie di *Vorticella.* Atti Pont. Accad. Nuovi Lincei Roma **74** 1921 p. 32.

158.—Katsunuma, S. Présence de *Trichomonas vaginalis* dans l'urine d'un jeune garçon. Bull. Soc. Path. exot. Paris **17** 1924 pp. 216 & 217.

159.—Kepner, W. A. The encystment of *Vampyrella elegans* (H. & L.). Science New York N.S. **59** 1924 pp. 577 & 578.

Kessel, J. F. *vide* Kofoid, C.A.

160.—Kirby, H. Morphology and mitosis of *Dinenympha fimbriata* sp. nov. Univ. Calif. Publ. Zool. Berkeley **26** 1924 pp. 199–220 pls. xix–xxii.

161.—Kligler, I. J. On the cultivation and biological characters of *Leishmania tropica*. Amer. J. trop. Med. Baltimore **4** 1924 pp. 69–76.

162.—Kligler, I. J. and **Weitzman,** I. Experimental study of trypanosomiasis in Palestine. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 437–458.

163.—Knowles, R. and **Gupta,** B. M. das. A note upon a Flagellate Protozoon found in the saliva. Ind. J. Med. Research Calcutta **11** 1924 pp. 737–741 11 text-figs.

164.—Koch, R. Die jungtertiäre Foraminiferen-fauna von Kabu (Res. Surabaja, Java). Eclog. geol. Helvet. Bâle **18** 1923 pp. 342–361.

165.—Kock, — de, and **Quinlan,** —. A short preliminary communication on anaplasmosis of sheep as observed in South Africa. Bull. Soc. Path. exot. Paris **17** 1924 pp. 651–653.

166.—Koffman, M. Ueber die Bedeutung der Wasserstoffionenkonzentration für die Encystierung bei einigen Ciliatenarten Arch. mikrosk. Anat. Entwick. mech. Berlin **103** 1924 pp. 168–181.

167.—Kofoid, C. A. and **Swezy,** O. Pentatrichomoniasis in Man. Amer. J. trop. Med. Baltimore **4** 1924 pp. 33–41.

168.—Kofoid, C. A. and **Swezy,** O. A note on Dr. Gunn's difficulties with *Councilmania*. J. Parasitol. Urbana **10** 1924 pp. 153–157.

169.—Kofoid, C. A. and **Swezy,** O. The cytology of *Entamoeba gingivalis* (Gros) Brumpt compared with that of *E. dysenteriae* with special reference to the determination of the Amoebas in bone-marrow in arthritis deformans of Ely's second type. Univ. Calif. Publ. Zool. **26** 1924 pp. 165–198 pls. xiv–xviii.

170.—Kofoid, C. A. and **Swezy,** O. *Karyamoeba falcata*, a new Amoeba from the human intestinal tract. Univ. Calif. Publ. Zool. Berkeley **26** 1924 pp. 221–242 pls. xxiii & xxiv.

171.—Kofoid, C. A., **Swezy,** O. and **Kessel,** J. F. On the distinctions between *Entamoeba coli* and *Councilmania lafleuri*. Univ. Calif. Publ. Zool. Berkeley **26** 1924 pp. 21–39 24 text-figs.

172.—Koppe, F. Die Schlammflora der ostholsteinischen Seen und des Bodensees. Arch. Hydrobiol. Stuttgart **14** 1924 pp. 619–672 pl. viia.

173.—Kriz, R. A. Selective action of strychnine and nicotine on a single cell. Amer. Nat. Lancaster Pa. **58** 1924 pp. 283–287 2 figs.

Kriz, R. A. *vide* Swindle, P. F.

174.—Krosz, K. Die Rhizopodenfauna des Pferdekotes. Arch. Protistenkunde Jena **48** 1924 pp. 316–341.

175.—Kudo, R. Studies on Microsporidia parasitic in mosquitoes. III. On *Thelohania legeri* Hesse (= *T. illinoisensis* Kudo). Arch. Protistenkunde Jena **49** 1924 pp. 147–162 pl. vii.

176.—Kudo, R. A biologic and taxonomic study of the Microsporidia. Illinois biological Monogr. **9** 1924 Nos. 2 & 3 pp. 1–268 27 pls.

177.—Kudo, R. Studies on Microsporidia parasitic in mosquitoes. VI.—On the development of *Thelohania opacita*, a Culicine parasite. J. Parasitol. Urbana **11** 1924 pp. 84–89 pl. xvii.

178.—Labbé, A. Introduction à l'étude des milieux marins hyperalcalins. Arch. Zool. Paris **62** 1924 pp. 401–568 pl. xvii.

179.—Lavier, G. Deux éspèces de *Giardia* du rat d'égout parisien (*Epimys norvegicus*). Ann. Parasitol. Paris **2** 1924 pp. 161–168 2 (14) text-figs.

180.—Lavier, G. *Eimeria hessei* n. sp., Coccidie intestinale de *Rhinolophus hipposideros*. Ann. Parasitol. Paris **2** 1924 pp. 335–339 3 text-figs.

Lavier, G. *vide* Brumpt, E.

181.—Legroux, —. et **Lwoff,** A. Présentation de préparations de sang de *Padda* montrant la parthénogènese des macrogamètes d'*Haemoproteus oryzivorae*. Bull. Soc. Path. exot. Paris **17** 1924 p. 287.

182.—Leigh-Sharpe, W. H. *Polythei helodrili* gen. et sp. n., a new coelozoic parasite of the earthworm. Ann. Mag. Nat. Hist. London Ser. 9 **13** pp. 553 & 554.

183.—Leiner, M. Das Glykogen in *Pelomyxa palustris* Greeff, mit Beiträgen zur Kenntnis des Tieres. Arch. Protistenkunde Jena **47** 1924 pp. 253–307 pls. x–xii.

184.—Lestoquard, F. Les piroplasmoses du mouton en Algérie. Bull. Soc. Path. exot. Paris **17** 1924 pp. 122–128 15 text-figs.

185.—Lestoquard, F. Deuxième note sur les Piroplasmoses du mouton en Algérie. L'anaplasmose : *Anaplasma ovis* n. sp. Bull. Soc. Path. exot. Paris **17** 1924 pp. 784–788.

Lestoquard, F. *vide* Donatien, A., also Sergent, Ed.

186.—Levaditi, C., **Nicolau,** S. et **Schoen,** R. L'étiologie de l'encéphalite épizootique du lapin, dans ses rapports avec l'étude expérimentale de l'encéphalite léthargique, *Encephalitozoon cuniculi* (nov. spec.). Ann. Inst. Pasteur Paris **38** 1924 pp. 651–712 pls. iii & iv.

187.—Levaditi, C., **Nicolau,** S. et **Schoen,** R. La microsporidiose du lapin : ses relations avec la rage. C.R. Acad. Sci. Paris **178** 1924 pp. 256–258.

188.—Levaditi, C., **Nicolau,** S. and **Schoen,** R. Virulence de l'*Encephalitozoon cuniculi* pour la souris. C.R. Soc. Biol. Paris **90** 1924 pp. 194–196.

189.—Levaditi, C., **Nicolau,** S. et **Schoen,** R. La nature microsporidienne de virus rabique. C.R. Soc. Biol. Paris **90** 1924 pp. 398–402.

190.—Levaditi, C., **Nicolau,** S. et **Schoen,** R. Nouvelles recherches sur l'*Encephalitozoon cuniculi*. C.R. Soc. Biol. Paris **90** 1924 pp. 662–666 3 text-figs.

191.—Levaditi, C., **Nicolau,** S. et **Schoen,** R. La nature du virus rabique. C.R. Soc. Biol. Paris **90** 1924 pp. 994–997.

192.—Levy, J. Studies on reproduction in *Amoeba proteus*. Genetics Menasha Wis. **9** 1924 pp. 124–150.

193.—Lewis, P. A. The inhibitory effect of acridine on the sporogony of a *Coccidium* (*Eimeria stiedae*). J. exp. Med. New York **40** 1924 pp. 263–267.

194.—Lignières, J. Démonstration en France de la réceptivité des ovins à l'*Anaplasma argentinum*, par injection à des Bovidés, du sang d'un mouton apporté de Buenos Ayres. Quelques réflexions sur les résultats obtenus. Bull. Soc. Path. exot. Paris **17** 1924 pp. 642–647.

195.—Lignières, J. Nouvelles preuves de l'inoculation de l'*Anaplasma* du boeuf au mouton, puis du mouton au mouton. Comparaison des résultats obtenus avec ceux publiés par l'Institut Pasteur d'Algérie. Bull. Soc. Path. exot. Paris **17** 1924 pp. 647–651.

196.—Lindemann, E. Ueber finnische Peridineen. Arch. Hydrobiol. Stuttgart **15** 1924 pp. 1–4 pl. i.

197.—Lindemann, E. Neue oder weing bekannte Flagellaten—IX. Mitteilungen über nicht genügend bekannte Peridineen. Arch. Protistenkunde Jena **47** 1924 pp. 431–439 pl. xxi.

198.—Logé, —. et **Bizard,** E. Sur quatre cas de piroplasmose équine (*Piroplasma caballi*) observés dans le departément de la Loire-Inférieure. Bull. Soc. Path. exot. Paris **17** 1924 pp. 347–354.

199.—Lwoff, A. Infection expérimentale à *Glaucoma piriformis* (Infusoire) chez *Galleria mellonella* (Lepidoptère). C.R. Acad. Sci. Paris **178** 1924 pp. 1106–1108.

200.—Lwoff, A. Le pouvoir de synthèse d'un Protiste hétérotrophe ; *Glaucoma piriformis*. C.R. Soc. Biol. Paris **91** 1924 pp. 344 & 345.

Lwoff, A. *vide* Chatton, E., *etiam* Legroux, —. ; also Treillard, M.

201.—Lynch, K. M. Ingestion of red blood corpuscles by an intestinal Amoeba with 8-nucleated cyst. Amer. J. trop. Med. Baltimore **4** 1924 pp. 43–48.

202.—Lynch, K. M. Note on the natural and cultural growth of certain intestinal Flagellates. Amer. J. trop. Med. Baltimore **4** 1924 pp. 537–545.

Macfie, J. W. *vide* Yorke, W.

203.—**Mackinnon,** D. L. and **Adam,** D. I. Notes on Sporozoa parasitic in *Tubifex.* 1. The life-history of *Triactinomyxon* Stolc. Q. J. Microsc. Sci. London **68** 1924 pp. 187–209 pls. vi–viii.

204.—**Mackinnon,** D. L. and **Adam,** D. I. Notes on four Astomatous Ciliates from Oligochaete worms. Q. J. Microsc. Sci. London **68** 1924 pp. 211–228 pl. ix.

Maitland, H. B. *vide* Cameron, G. C.

205.—**Manifold,** J. A. A case of human sarcosporidiosis. Trans. R. Soc. trop. Med. London **18** 1924 p. 5.

206.—**Manouelian,** Y. and **Viala,** J. *Encephalitozoon rabiei* parasite de la rage. Ann. Inst. Pasteur Paris **38** 1924 pp. 258–267 pls. iii–vi.

207.—**Manouelian,** Y., et **Viala,** J. *Encephalitozoon rabiei* parasite de la rage. C.R. Acad. Sci. Paris **178** 1924 pp. 344 & 345.

208.—**Maplestone,** P. A. A survey of the parasites found in natives of Sierra Leone. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 183–187.

209.—**Marin,** A. and **Llueca,** F. G. Sobre un sondeo en Puigreig (Barcelona). Bol. Soc. Espan. Hist. nat. Madrid **24** 1924 pp. 201 & 202 pl. vi.

210.—**Martinotti,** A. Foraminiferi della molassa di Varano (Varesotto). Atti Soc. ital. Sci. Nat. Milano **62** 1924 pp. 317–320.

211.—**Mast,** S. O. and **Pusch,** L. C. Modification of response in *Amoeba.* Biol. Bull. Wood's Hole **46** 1924 pp. 55–59.

212.—**Mattes,** O. Ueber Lebensweise, Morphologie und Physiologie von *Amoeba sphaeronucleolus* Greeff und *Amoeba terricola* Greeff. Arch. Protistenkunde Jena **47** 1924 pp. 386–412 pls. xvii & xviii.

213.—**Mazza,** S. Sur la durée de l'immunité relative dans le paludisme des oiseaux. Arch. Inst. Pasteur Alger **1** 1923 pp. 609–611.

214.—**Mazza,** S. On the duration of relative immunity in malaria of birds. J. trop. Med. London **27** 1924 pp. 98 & 99.

Melnotte, P. *vide* Dekester, M.

215.—**Mengaud,** L. Découverte d'une Nummulite nouvelle dans le Maestrichtien à *Biradiolites* du dôme de Cezan-Lavardens (Gers), et étude stratigraphique du gisement. Bull. Soc. géol. France Paris sér. 4 **23** 1924 pp. 356–359.

216.—**Metcalf,** M. M. *Opalina japonica* Sugiyama [not Metcalf]. Science New York N.S. **59** 1924 p. 64.

217.—**Monard,** A. La faune de la Motte. Lac de Neuchâtel. Rev. Hydrobiol. Aarau **2** 1922 pp. 150–187.

218.—**Monfallet,** M. D. L'Iritis à *Herpetomonas* du Cheval. An. Zool. Aplic. Santiago **8** 1921 pp. 9–15.

219.—**Montenegro,** J. The inoculability of *Leishmania.* Amer. J. trop. Med. Baltimore **4** 1924 pp. 331–340.

220.—**Moore,** E. L. Regeneration at various phases in the life-history of *Spathidium spathula* and *Blepharisma undulans.* J. exp. Zool. Philadelphia **39** 1924 pp. 249–316.

221.—**Moore,** E. L. Endomixis and encystment in *Spathidium spathula.* J. exp. Zool. Philadelphia **39** 1924 pp. 317–337.

222.—**Moore,** E. L. A further study of the effects of conjugation and encystment in *Spathidium spathula.* J. exp. Zool. Philadelphia **40** 1924 pp. 217–230.

Moore, E. L. *vide* Woodruff, L. L.

223.—**Moréa,** L. Adaptation des Infusoires à des doses variées de chlorure de sodium. C.R. Soc. biol. Paris **91** 1924 pp. 169–171.

224.—**Moréa,** L. Adaptation des Infusoires à des doses de NaCl augmentées. C.R. Soc. biol. Paris **91** 1924 pp. 461 & 462.

225.—**Morgan,** W. de. *Foettingeria actiniarum* (parasitic in Anemones) Q. J. microsc. Sci. London **68** 1924 pp. 343–360 pl. xi.

Murugesan, P. *vide* Napier, L. E.

226.—**Napier,** L. E. The preparation of N. N. N. media of different hydrogen-ion concentrations. Ind. J. Med. Res. Calcutta **11** 1924 pp. 733–736 6 charts.

227.—**Napier,** L. E. and **Murugesan,** P. The viability of the Flagellate-stage of *L. donovani* with reference to the hydrogen-ion concentration of its environment. Ind. J. Med. Res. Calcutta **11** 1924 pp. 1219–1226.

228.—**Nassonov,** D. Der Exkretionsapparat (kontraktile Vakuole) der Protozoa als Homologe des Golgischen Apparates der Metazoenzellen. Arch. mikrosk. Anat. Entwick. Mech. Berlin **103** 1924 pp. 437–480 pls. i–iii.

229.—**Naumann,** E. Quantitative Untersuchungen über die Organismenformation der Wasseroberfläche. II. *Chromulina rosanoffi* (Woronin) Bütschli. Intern. Rev. Hydrobiol. Leipzig **12** 1924 pp. 215–217 Tfblg. xxi.

230.—**Naumann,** E. Untersuchungen über die Eisenorganismen Schwedens. 1. Die Erscheinungen der Sideroplastie in den Gewässern des Teichgebiets Aneboda. K. Svenska Vet.-Akad. Handl. Stockholm **62** 1921 No. 4 pp. 1–68 6 pls.

Naville, A. *vide* Guyénot, E.

231.—**Nesmelow,** Z. Untersuchungen über Amöben. 1ste. Teil. Centralbl. Bakt. Jena Abt. 1 **91** 1924 Orig. pp. 182–191.

Nicholson, F. M. *vide* Cowdry, E. V.

Nicolau, S. *vide* Levaditi, C.

232.—**Nicolle,** C. et **Anderson,** C. Recherches expérimentales sur le mode de transmission du Kala-Azar. Arch. Inst. Pasteur Tunis **13** 1924 pp. 155–164.

233.—**Nieschulz,** O. Ueber *Entamoeba dobliecki* mihi, eine Darmamöbe des Schweines. Arch. Protistenkunde Jena **48** 1924 pp. 365–370.

234.—**Nieschulz,** O. Ueber den Bau von *Giardia caprae* mihi. Arch. Protistenkunde Jena **49** 1924 pp. 278–286 4 text-figs.

235.—**Nieschulz,** O. Eine neue Gregarinengattung für *Schneideria metamorphosa* Nowlin 1922 (*Paraschneideria* n. gen.). Zool. Anz. Leipzig **60** 1924 pp. 149 & 150.

236.—**Noguchi,** H. Action of certain biological, chemical and physical agents upon cultures of *Leishmania*: some observations on plant and Insect Herpetomonads. Proc. Intern. Conference Health Problems trop. America Kingston Jamaica **1924** (reprint) 24 pp. 4 pls.

237.—**Oehler,** R. Weitere Mitteilungen über gereinigte Amoben- und Ciliatenzucht. Arch. Protistenkunde Jena **49** 1924 pp. 112–134.

238.—**Oehler,** R. Gereinigte Zucht von freilebenden Amöben, Flagellaten und Ciliaten. (Sammelbericht früherer Arbeiten.) Arch. Protistenkunde Jena **49** 1924 pp. 287–296.

239.—**Ogilvie,** Helen S. Microplankton from the South Coast of Ireland. June, 1920–November, 1921. (Rapport atlantique 1921.) Rapp. et proc.-verb. explor. mer. Copenhague **29** 1923 pp. 30–71.

240.—**Ostroumoff,** A. *Noctiluca miliaris* in Symbiose mit grünen Algen. Zool. Anz. Leipzig **58** 1924 p. 162.

241.—**Ozawa,** Y. On some species of *Fusulina* from Honan, China. Japan. J. Geol. Geogr. Tokyo **2** 1923 pp. 35–39 pl. v.

242.—**Ozawa,** Y. Preliminary notes on the classification of the Family *Fusulinidae* (Japanese). Journ. geol. Soc. Tokyo **29** 1922 pp. 357–374. Abstr. in Japan. J. Geol. Geogr. Tokyo **2** 1923 pp. 16–17 (abstracts).

243.—**Pacheco,** G. La vérification de l'*Iodamoeba bütschlii* (Prowazek) Dobell 1919. C.R. Soc. biol. Paris **91** 1924 pp. 843 & 844 5 text-figs.

244.—**Paillot,** A. Sur *Thelohania mesnili*, Microsporidie nouvelle, parasite des chenilles de *Pieris brassicae* L. C.R. Soc. Biol. Paris **90** 1924 pp. 501–503 1 text-fig.

245.—**Paillot,** A. Sur *Perezia pieris*, Microsporidie nouvelle parasite de *Pieris brassicae* L. C.R. Soc. Biol. Paris **90** 1924 pp. 1255–1257 1 text-fig.

246.—**Panayotatou,** A. Sur quelques cas nouveaux d'amibiase extra-intestinale. Bull. Soc. Path. exot. Paris **17** 1924 pp. 211–214.

247.—**Pantin,** C. F. On the physiology of amoeboid movement. II.—The effect of temperature. Brit. J. exper. Biol. Edinburgh **1** 1924 pp. 519–538.

Parrot, L. *vide* Foley, H.; also Sergent, Ed.

248.—Pascher, A. Zur Homologisierung der Chrysomonadencysten mit den Endosporen der Diatomeen. Arch. Protistenkunde Jena **48** 1924 pp. 196–203.

249.—Pascher, A. Neue oder wenig bekannte Flagellaten.—XII. Arch. Protistenkunde Jena **48** 1924 pp. 492–508 19 text-figs.

250.—Pérard, C. Recherches sur les Coccidies et les coccidioses du lapin. Ann. Inst. Pasteur Paris **38** 1924 pp. 953–976 7 text-figs.

251.—Pérard, C. Recherches sur les Coccidies et les coccidioses du lapin. C.R. Acad. Sci. Paris **178** 1924 pp. 2131–2134.

252.—Pérard, C. Recherches sur la destruction des oocystes de Coccidies. C.R. Acad. Sci. Paris **179** 1924 pp. 1436–1438.

253.—Petrochi, J. and **Zuccarini,** J. A. Présence du *Plasmodium danilewskyi* et d'*Haemoproteus* sp. dans le sang des moineaux de Buenos-Aires. C.R. Soc. Biol. Paris **91** 1924 pp. 1031 & 1032.

254.—Petzetakis, —. A propos des bronchites amibiennes. Bull. Soc. Path. exot. Paris **17** 1924 pp. 553 & 554.

256.—Petzetakis, —. Amoebic bronchitis and frequent presence of live *Entamoebae* in the sputum and urine during acute amoebic dysentery. J. trop. Med. London **27** 1924 pp. 74 & 75.

257.—Phisalix, M. Coccidiose intestinale du *Scincus officinalis* Laur. à *Cyclospora scinci* nov. sp. Bul. Mus. Paris **1924** pp. 100 & 101.

258.—Phisalix, M. Note complémentaire sur *Cyclospora viperae*, Coccidie parasite de l'intestin de la vipère aspic. Bul. Mus. Paris **1924** pp. 497–500 4 text-figs.

259.—Phisalix, M. *Cyclospora zamenis* nov. sp. Coccidie à localisation intestinale de *Zamenis viridiflavus* Lacép. Bul. Mus. Paris **1924** pp. 501 & 502.

260.—Phisalix, M. Note complémentaire sur *Cyclospora viperae*, Coccidie parasite de l'intestin de la Vipère aspic. Bull. Soc. Path. exot. Paris **17** 1924 pp. 559–562.

261.—Phisalix, M. Coccidiose intestinale de *Vipera berus* à *Cyclospora babaulti* nov. sp. Bull. Soc. Path. exot. Paris **17** 1924 pp. 868–871 15 text-figs.

262.—Phisalix, M. *Cyclospora tropidonoti* nov. spec., Coccidie intestinale de la couleuvre à Collier. Bull. Soc. Path. exot. Paris **17** 1924 pp. 871–873 10 text-figs.

Plantureux, E. *vide* Sergent, Ed.

263.—Poisson, R. Sur quelques Grégarines, parasites de Crustacés, observées a Luc-sur-Mer (Calvados). Bull. Soc. Zool. France Paris **49** 1924 pp. 238–248 2 (22) text-figs.

264.—Poisson, R. Sur quelques Microsporidies parasites d'Arthropodes. C.R. Acad. Sci. Paris **178** 1924 pp. 664–666 17 text-figs.

265.—Ponselle, A. Culture des Trypanosomes pathogènes. C.R. Acad. Sci. Paris **178** 1924 pp. 1219–1221.

266.—Popoff, P. An attempt at growing pathogenic Protozoa by the method of collodion sacs. J. trop. Med. London **27** 1924 pp. 247 & 248.

267.—Popoff, M. and **Jeljaskowa,** M. Über die Beschleunigung der Teilungsrate von *Paramoecium caudatum* durch zellstimulierende Mittel. Biol. Centralbl. Leipzig **44** 1924 pp. 87–90.

Porter, A. *vide* Fantham, H. B.

268.—Prytherch, H. F. The *Ichthyophthirius* Disease of Fishes and Methods of Control. Rept. U. S. Comm. Fish. Washington for **1923,** 1924 Appendix IX 6 pp. 3 pls.

269.—Puigaudeau, O. du. Le mikroplankton de la baie du Croisic. III. Bull. Soc. Zool. France Paris **48** 1924 pp. 351–362.

270.—Reich, W. W. *Trypanosoma brucei* as a filterable virus. Studies on the site of origin of the filter-passing bodies. J. Parasitol. Urbana **10** 1924 pp. 171–181.

Reich, W. W. *vide* Davis, N. C.

271.—Reynolds, B. D. Interactions of protoplasmic masses in relation to the study of heredity and environment in *Arcella polypora*. Biol. Bull. Wood's Hole **46** 1924 pp. 106–140 1 pl.

272.—Richter, H. Zum Problem des Generationswechsels und seine biologische Bedeutung bei den Protozoen. Jenaische Zs. Natw. Jena **60** 1924 pp. 45–82.

273.—Risch, C. Ein neues Verfahren zur Zählung der Plankton-organismen. Arch. Hydrobiol. Stuttgart **15** 1924 pp. 416–421.

274.—Robertson, T. B. The nature of the factors which determine the duration of the period of lag in cultures of Infusoria. Austral. Journ. exp. Biol. med. Sci. Adelaide **1** 1924 pp. 105–120.

275.—Robertson, T. B. The influence of washing upon the multiplication of isolated Infusoria and upon allelocatalytic effect in cultures initially containing two Infusoria. Austral. Journ. exp. Biol. med. Sci. Adelaide **1** 1924 pp. 151–173.

276.—Ross, R. The transmission of human malaria. Nature London **113** 1924 p. 353.

Rougebief, H. *vide* Sergent Ed.

277.—Russo, A. Sul different ritmo di divisione dei micronuclei durante la conjugazione vera in *Cryptochilum echini* Maupas. Atti R. Accad. Lincei Roma ser. 5 **33** i 1924 pp. 262–264.

278.—Russo, A. Gl'Individui misti formatisi dagli exconiuganti, dopo la coniugazione vera in *Cryptochilum echini* Maupas, e l'origine dei Gametogeni. Atti R. Accad. Lincei Roma ser. 5 **33** 1 1924 pp. 377–383 6 text-figs.

279.—Russo, A. Sulla diversa costituzione dei due gameti puri in *Cryptochilum echini* Maupas, risultante dall'analisi delle successioni nucleari, e sulla prevalenza del micronucleo globuliforme. Atti R. Accad. Lincei Roma ser. 5 **33** ii 1924 pp. 230–236 3 text-figs.

280.—Rylov, W. M. Zur Biologie des seltenen planktonischen Infusoriums *Epistylis rotans* Svec. Intern. Rev. Hydrobiol. Leipzig **12** 1924 pp. 218–227.

281.—Sacco, F. Una Nummulite sdoppiata. Atti R. Accad. Lincei Serie 5 **33** ii 1924 pp. 389–392.

282.—Saceghem, R. van. Les theilerioses. Note préliminaire. Bull. Soc. Path. exot. Paris **17** 1924 pp. 637–639.

283.—Saceghem, R. van. *Trypanosoma congolense* dans l'Est africain. C.R. Soc. biol. Paris **91** 1924 pp. 1455 & 1456.

284.—Sandon, H. Some Protozoa from the soils and mosses of Spitsbergen. (Results of the Oxford University Expedition to Spitsbergen, No. 27.) J. Linn. Soc. Zool. London **35** 1924 pp. 449–475 pl. xxiv.

285.—Sandon, H. and **Cutler,** D. W. Some Protozoa from the soils collected by the "Quest" Expedition (1921–1922). J. Linn. Soc. Zool. **36** 1924 pp. 1–12.

286.—Saunders, J. T. The effect of the hydrogen-ion concentration on the behaviour, growth and occurrence of *Spirostomum*. Proc. Cambr. Phil. Soc. (Biol. Sci.) **1** 1924 pp. 189–203.

Sausseau, L. *vide* Donatien, A.

287.—Scarth, G. W. Can the hydrogen-ion concentration of living protoplasm be determined? Science New York N. S. **60** 1924 pp. 431 & 432.

288.—Schaeffer, A. A. Investigations on marine Amoebas. Carnegie Inst. Year Book Washington **23** 1924 pp. 199 & 200.

289.—Scherffel, A. Ueber die Cyste von *Monas*. Arch. Protistenkunde **48** 1924 pp. 187–195.

290.—Schmidt, F. Virulenzänderung des *Trypanosoma equinum* nach Behandlung mit "Bayer 205." Arch. Schiffs. Tropenhyg. Leipzig **28** 1924 pp. 397–403.

291.—Schneider, H. Kern und Kernteilung bei *Ceratium tripos*. Arch. Protistenkunde Jena **48** 1924 pp. 302–315 pl. xiii.

Schoen, R. *vide* Levaditi, C.

292.—Schulz, M. Die Kernteilung von *Leptomonas fasciculata* nebst einem Vergleich mit der Kernteilung bei *Leishmania donovani*. Arch. Protistenkunde Jena **49** 1924 pp. 216–236 pl. ix.

293.—Schulze, P. Der Nachweis und die Verbreitung des Chitins mit einem Anhang über das komplizierte Verdauungssystem der Ophryoscoleciden. Zeits. Morph. Ökol. Tiere Berlin **2** 1924 pp. 643–666 13 text-figs.

294.—Schwarz, A. Ein Verfahren zur Freilegung von Radiolarien aus Kieselschiefern. Senckenbergiana Frankfurt **6** 1924 pp. 239–244 1 pl.

Scremin, L. *vide* Bresslau, E.

295.—Sellards, A. W. and **Theiler,** M. Investigations concerning amoebic dysentery. Amer. J. trop. Med. Baltimore **4** 1924 pp. 309–330.

296.—Sergent, Ed. et Et. et **Catanei,** A. Étude expérimentale du paludisme des oiseaux (*Plasmodium relictum*). Notes xxv–xxvii. Arch. Inst. Pasteur Alger **1** 1923 pp. 264–278.

297.—Sergent, Ed. et **Donatien,** A. Existence aux confins algéro-marocains de l'infection équine due à *Trypanosoma marocanum* et considérations, à ce propos, sur l'épreuve des réinoculations croisées de Laveran et Mesnil. Arch. Inst. Pasteur Alger **2** 1924 pp. 158–161.

298.—Sergent, Ed. et **Donatien,** A. Débat et nagana chez le dromadaire. Arch. Inst. Pasteur Alger **2** 1924 p. 162.

299.—Sergent, Ed., **Donatien,** A. et **Deguillaume,** A. Notes sur le Débab, trypanosomiase des dromadaires : évolution, influence sur la gestation, prémunition. Arch. Inst. Pasteur Alger **2** 1924 pp. 147–157.

300.—Sergent, Ed., **Donatien,** A., **Parrot,** L., **Lestoquard,** F., **Plantureux,** E., **Rougebief,** H. Études expérimentales sur les piroplasmoses bovines d'Algérie. Ann. Inst. Pasteur **38** 1924 pp. 273–343 38 text-figs.

301.—Sergent, Ed., **Donatien,** A., **Plantureux,** E. et **Deguillaume,** A. Notes sur les trypanosomiases (1921–1923). Bull. Soc. Path. exot. Paris **17** 1924 pp. 130 & 231.

302.—Sergent, Ed., **Gueidon,** E., **Bouguet,** A. et **Catanei,** A. Existence de la leishmaniose cutanée chez le chien dans une localité du Tell algérien où le bouton d'Orient est endémique chez l'homme. Bull. Soc. Path. exot. Paris **17** 1924 pp. 360 & 361.

Setna, S. *vide* Bhatia, B. L.

303.—Severtzoff, L. B. Method of counting, culture medium and pure cultures of soil Amoebae. Centralbl. Bakt. Jena **92** 1924 Orig. pp. 151–158.

304.—Seyfarth, C. Malariaparasiten und Malariapigmentbefunde in der Leiche. Arch. Schiffs. Tropenhyg. Leipzig **28** 1924 pp. 351–358.

305.—Sherborn, C. D. Index Animalium 1801–1850. Parts IV & V. London (British Museum Trustees) **1924** pp. 641–943, 944–1196.

306.—Shortt, H. E. and **Swaminath,** C. S. Note on *Nosema adiei* (Christophers 1922). Ind. J. Med. Research Calcutta **12** 1924 pp. 181–183 pl. xiii.

307.—Shortt, H. E. and **Swaminath,** C. S. Note on the infection of a mouse by means of bed-bugs, *Cimex hemiptera* Fabr., fed on the peripheral blood of a case of Kala-Azar. Ind. J. Med. Research Calcutta **11** 1924 pp. 965 & 966.

308.—Shortt, H. E. and **Swaminath,** C. S. The behaviour of cultures of *Herpetomonas donovani* in bed-bugs, *Cimex lectularius* Linn. and *Cimex hemiptera* Fabr. Ind. J. Med. Research Calcutta **12** 1924 pp. 391–396 pls. xxi–xxiii.

309.—Shumway, W. The genus *Haplozoon*, Dogiel, observations on the life-history and systematic position. J. Parasitol. Urbana **11** 1924 pp. 59–74 pls. xv & xvi.

310.—Silvestri, A. Fauna paleogenica di Vasciano presso Todi. Boll. Soc. geol. ital. Roma **42** 1923 (1924) pp. 7–29 pl. i.

311.—Silvestri, A. Ortostilia e flessostilia nei Rizopodi reticolari. Atti Pont. Accad. Nuovi Lincei Roma **73** 1920 pp. 50–70.

312.—Silvestri, A. Microfauna pliocenica a Rizopodi reticolari di Capocolle presso Forlì. Atti Pont. Accad. Nuovi Lincei Roma **76** 1923 pp. 70–77.

313.—Silvestri, A. Il criterio delle Alveoline. Atti Pont. Accad. Nuovi Lincei Roma **76** 1923 pp. 115–126.

314.—Silvestri, A. Il dimorfismo nella *Textularia concava* Karrer sp. Atti Pont. Accad. Nuovi Lincei Roma **73** 1921 pp. 221–227.

315.—Silvestri, A. Orbitoidi cretacee nell'Eocene della Brianza. Mem. Pont. Accad. Nuovi Lincei Roma ser. 2 **5** 1919 pp. 31–107 1 pl.

316.—Silvestri, A. Lo stipite delle ellissoforme e le sue affinita. Mem. Pont. Accad. Nuovi Lincei Roma ser. 2 **6** 1923 pp. 231–270 1 pl.

317.—Simon, M. Ueber die Häufigkeit der Lamblieninfektion im Rheinlande. Centralbl. Bakt. Jena Abt. 1 **91** 1924 Orig. pp. 309–314.

318.—Sinton, J. A. Methods for the enumeration of parasites and leucocytes in the blood of malarial patients. Ind. J. Med. Research Calcutta **12** 1924 pp. 341–346.

319.—Skvortzow, B. W. Neue oder wenig bekannte Flagellaten—X. Farblose Euglenaceen aus Nord-Mandschurei (China). Arch. Protistenkunde Jena **48** 1924 pp. 180–186 2 (19) text-figs.

320.—Sokoloff, B. Das Regenerationsproblem bei Protozoen. Arch. Protistenkunde Jena **47** 1924 pp. 143–252 pls. viii & ix.

Sonia, C. *vide* Zotta, G.

Spencer, H. *vide* Woodruff, L. L.

321.—Stankovitch, S. *Eimeria misgurni* n. sp.et *Eimeria cobitis* n. sp. deux nouvelles Coccidies des poisson d'eau douce. C.R. Soc. Biol. Paris **90** 1924 pp. 255–258 14 text-figs.

322.—Steinmann, P. Ein Schmarotzer der Regenbogenforellenbrut. Rev. Hydrobiol. Aarau **2** 1924 pp. 207 & 208.

323.—Stempell, W. Weitere Beiträge zur Physiologie der pulsierenden Vakuole von *Paramoecium*. Arch. Protistenkunde Jena **48** 1924 pp. 342–364.

324.—Stephens, J. W. Some morphological features of *Plasmodium falciparum*. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 33–35 pls. ii & iii.

325.—Stephens, J. W. and **Gordon,** R. M. The relative number of male and female crescents. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 55–59.

326.—Stephens, J. W. and **Gordon,** R. M. The crescent and the red cell, Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 207–210 pls. x–xiii.

327.—Stern, C. Untersuchungen über Acanthocystiden. Arch. Protistenkunde Jena **48** 1924 pp. 436–491 pls. xvi–xx.

328.—Stickland, J. The aquatic Protozoa of the Melbourne District. Pt. II. Vict. Nat. Melbourne **41** 1924 pp. 84–94 1 pl.

329.—Stiles, C. W. Zoological Nomenclature: official list of certain generic names. Nature London **113** 1924 pp. 821 & 822.

330.—Stolte, A. A. Morphologische und physiologische Untersuchungen au *Blepharisma undulans* Stein. (Studien über den Formwechsel der Infusorien.) Arch. Protistenkunde Jena **48** 1924 pp. 245–301 pls. x–xii.

331.—Strong, R. P. Investigations upon Flagellate infections. Amer. J. trop. Med. Baltimore **4** 1924 pp. 345–385 6 pls.

332.—Suldey, E. W. Dysenterie amibienne spontanée chez le chimpanzé (*Troglodytes niger*). Bull. Soc. Path. exot. Paris 17 1924 pp. 771–773.

Susu, B. *vide* Archibald, R. G.

Swaminath, C. S. *vide* Shortt, H. E.

Swezy, O. *vide* Kofoid, C. A.

333.—Swindle, P. F. and **Kriz,** R. A. Depressing effects of strychnine on *Vorticella* and other unicellular forms. Amer. Nat. Lancaster Pa. **58** 1924 pp. 457–467.

334.—Tagliani, G. Studi critico-sistematici sugl'Infusori. III & IV. Ann. Mus. Zool. Univ. Napoli **5** No. 3 1922 pp. 1–13.

335.—Taliaferro, W. H. A reaction-product in infections with *Trypanosoma lewisi* which inhibits the reproduction of the Trypanosomes. J. exp. Med. New York **39** 1924 pp. 171–190.

336.—Taliaferro, W. H. Note on *Endamoeba barreti* Taliaferro and Holmes, from *Chelydra serpentina*. J. Parasitol. Urbana **11** 1924 pp. 99 & 100.

337.—Taliaferro, W. H. A study of the interaction of host and parasite: a reaction-product in infections with *Trypanosoma lewisi* which inhibits the reproduction of the Trypanosomes. Proc. Nat. Acad. Sci. Washington **10** 1924 pp. 12–16.

338.—Taylor, M. *Amoeba proteus*, some new observations on its nucleus. life-history and culture. Q. J. Microsc. Sci. London **69** 1924 pp. 119–143 11 text-figs.

339.—Taylor, C. V. and **Farber,** W. P. Fatal effects of the removal of the micronucleus in *Euplotes*. Univ. Calif. Publ. Zool. Berkeley **26** 1924 pp. 131–144 pl. vii.

340.—Terni, C. Sulle variazioni planctoniche nei sedimenti delle acque industriali. Rend. Convegno Genova U. Z. I. **1923** pp. 47–49 (in Monit. Zool. Ital. Firenze **35** No. 11 1924).

Theiler, M. *vide* Sellards, A. W.

341.—Thomson, J. G. Cultures of malarial parasites from Rhodesia and their relation to blackwater fever. Trans. R. Soc. trop. Med. London **18** 1924 p. 8.

Thomson, M. D. *vide* Wagener, E. H.

Torres, C. de M. *vide* Cunha, A. M. da.

342.—Trappmann, W. Morphologie und Entwickelungsgeschichte von *Nosema apis* Zander. Arb. Biol. Anstalt Berlin **11** 1923 pp. 609–622 1 pl.

343.—Treillard, M. et **Lwoff,** A. Sur un Infusoire parasite de la cavité générale des larves de Chironomes. Sa sexualité. C.R. Acad. Sci. Paris **178** 1924 pp. 1761–1764.

344.—Triffitt, M. J. Note on an *Eimeria* n. sp. found in the faeces of an eland. J. trop. Med. London **27** 1924 pp. 223–225 1 pl.

345.—Troitzkaja, O. V. Zur Morphollogie und Entwickelungsgeschichte von *Uroglenopsis americana* (Calkins) Lemmerm. Arch. Protistenkunde Jena **49** 1924 pp. 260–277.

346.—Tyzzer, E. E. The chicken as a carrier of *Histomonas meleagridis* (blackhead): the Protozöon in its flagellated stage. J. Med. Research Boston **44** 1924 pp. 676 & 677.

Urodschevich, V. *vide* Dschunkovsky, E.

347.—Vaughan, T. W. American and European Tertiary larger Foraminifera and Corals. Bull. Geol. Soc. America New York **35** 1924 pp. 173 & 174.

Viala, J. *vide* Manouelian, Y.

348.—Vincent, Mary. On a new Gregarine, *Anisolobus dacnecola* n.g. n. sp., a parasite of *Dacne rufifrons* Fabr. (Coleoptera). Parasitol. Cambridge **16** 1924 pp. 44–47.

349.—Vincent, M. On a new Gregarine, *Gregarina segmentata* n. sp., an intestinal parasite of *Cis bidentatus* Olivier (Coleoptera). Parasitol. Cambridge **16** 1924 pp. 296–302 9 text-figs.

350.—Vlerk, I. M. van der. *Miogypsina dehaartii* nov. spec. de Larat (Moluques). Eclog. geol. Helvet. Bâle **18** 1924 pp. 429–432.

351.—Vlerk, I. M. van der. Een nieuwe *Cycloclypeus*-soort van Oost-Borneo. Samml. geol. Reichsmus. Leiden **10** 1923 pp. 137–140 2 pls.

352.—Vlerk, I. M. van der. Studiën over Nummulinidae en Alveolinidae. Haar voorkomen op Soembawa en haar Beteekenis voor de Geologie van Oost-Azië en Australië. Verh. geol.-mijnb. Gen. Ned. 's-Gravenhage Geol. ser. **5** 1922 pp. 329–464 2 pls. and map.

353.—Vlerk, I. M. van der. Een overgangsvorm tusschen *Orthophragmina* en *Lepidocyclina* uit het Tertiar van Java. Verh. geol.-mijnb. Gen. Ned. 's-Gravenhage Geol. Ser. **7** 1923 pp. 91–98 1 pl.

354.—Wagener, E. H. and **Thomson,** M. D. Experimental amoebiasis in cats from acute and chronic human cases. Univ. Calif. Publ. Zool. Berkeley **26** 1924 pp. 267–280.

355.—Wayland, E. J. and **Davies,** A. M. The Miocene of Ceylon. Quart. J. geol. Soc. London **79** 1923 pp. 577–602 pls. xxviii & xxix.

Weill, R. *vide* Chatton, E.

356.—Weindel, V. Ueber Amöbenenteritis. Verh. Mitth. Siebenb. Ver. Natw. Hermannstadt **72–74** 1924 pp. 265–269.

357.—Weindel, V. Beitrag zur Morphologie und Biologie der Plasmodien von malaria tropica. Verh. Mitth. Siebenb. Ver. Natw. Hermannstadt **72–74** 1924 pp. 260–264 1 pl.

Weitzman, I. *vide* Kligler, I. J.

358.—Wenrich, D. H. Studies on *Euglenamorpha hegneri* n.g. n. sp., a Euglenoid Flagellate found in tadpoles. Biol. Bull. Wood's Hole **47** 1924 pp. 149–174 4 pls.

359.—Wenrich, D. H. A new Protozoan parasite, *Amphileptus branchiarum* n. sp., on the gills of tadpoles. Trans. Amer. Microsc. Soc. Menasha Wis. **43** 1924 pp. 191–199 pls. ix & x.

360.—Wenrich, D. H. Protozoa on the skin and gills of tadpoles. Trans. Amer. Microsc. Soc. Menasha Wis. **43** 1924 pp. 200–202.

361.—Wenyon, C. M. and Alcock, W. B. A *Trepomonas* coprozoic in human faeces. Trans. R. Soc. trop. Med. **18** 1924 p. 9 3 text-figs.

362.—Wermel, E. Neue oder wenig bekannte Flagellaten.—XI. Beschreibung neuer Flagellaten aus Russland. Arch. Protistenkunde Jena **48** 1924 pp. 204–206.

363.—Wermel, E. Zur Biologie der Flagellaten eines Moortümpels. Arch. Protistenkunde Jena **48** 1924 pp. 207–212.

364.—White, E. I. Note on a new species of "Terebelloid" and other phenomena in the great pit at Harefield, Middlesex. Proc. Geol. Ass. London **34** 1923 pp. 43–46.

365.—Woerdeman, M. W. Observations de coloration vitale des Protozoaires par le vert Janus. Arch. Néerl. Sci. Soc. Holl. Haarlem III C **9** 1924 pp. 409–413.

366.—Woloszynska, J. Neue Peridineen-Arten, nebst Bemerkungen über den Bau der Hülle bei *Gymno-* und *Glenodinium*. Bull. intern. Acad. Cracovie **1917B** pp. 114–122 pls. xi–xiii.

367.—Woloszynska, J. Polnische Süsswasser-Peridineen. Bull. intern. Acad. Cracovie **1915B** pp. 260–285 pls. x–xiv.

368.—Woloszynska, J. Die Algen der Tatraseen und- Tümpel. I. Bull. intern. Acad. Cracovie **1918B** pp. 196–200 pl. xiv.

369.—Woodruff, L. L. and Moore, E. L. On the longevity of *Spathidium spathula* without endomixis or conjugation. Proc. Nat. Acad. Sci. Washington **10** 1924 pp. 183–186.

370.—Woodruff, L. L. and Spencer, H. Studies on *Spathidium spathula*. I.—The significance of conjugation. J. exp. Zool. Philadelphia **39** 1924 pp. 133–196.

371.—Yabe, H. and Hanzawa, S. Foraminifera from the Natsukawa-limestone, with a note on a new subgenus of *Polystomella*. Japan. J. Geol. Geogr. Tokyo **2** 1923 pp. 95–100.

372.—Yamasaki, S. Ueber *Leptomonas ctenocephali*, *Trypanosoma lewisi* und pathogene Trypanosomenarten im Hundefloh. Arch. Protistenkunde Jena **48** 1924 pp. 136–179 pl. viii.

373.—Yorke, W. and Macfie, J. W. *Trypanosoma evansi* and *Ornithodorus crossi*. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 125 & 126.

374.—Yorke, W. and Macfie, J. W. Certain observations on malaria made during treatment of general paralysis. Lancet London **1924** i pp. 1017–1019.

375.—Yorke, W. and Macfie, J. W. Observations on malaria made during treatment of general paralysis. Trans. R. Soc. trop. Med. London **18** 1924 pp. 13–33. (Discussion, pp. 33–44.)

376.—Young, R. A. On the excretory apparatus in *Paramoecium*. Science New York N. S. **60** 1924 p. 244.

377.—Young, T. McCombie. Fourteen years' experience with Kala-Azar work in Assam. Trans. R. Soc. trop. Med. London **18** 1924 pp. 81–97. (Discussion, pp. 98–107.)

378.—Zandt, F. Fischparasiten des Bodensees. Centralbl. Bakt. Jena Abt. 1 **92** Orig. pp. 225–271 33 text-figs.

379.—Zotta, G. La leptomonadiose spontanée chez *Cynanchum acutum*, Asclépiadée autochtone en Roumanie. C.R. Soc. Biol. Paris **90** 1924 pp. 141–143.

380.—Zotta, G. et Sonia, C. Culture du *Leptomonas pyrrhocoris* en colonies de surface sur un milieu solide dépourvu de sang frais : la gélose-rate. C.R. Soc. biol. Paris **91** 1924 pp. 752–754.

Zuccarini, J. A. *vide* Dios, R. L.; also Petrochi, J.

II.—SUBJECT INDEX.

COMPREHENSIVE AND GENERAL.

Historical.—Eckstein, **85**; Grassi, **116-118**; Ross, **276**.

Nomenclature.—Stiles, **329**.

Indices.—Sherborn, **305**.

Lectures, Addresses.—Ashworth, **11**; Bruce, **31**.

General Accounts Reviews. — Brumpt, **34** & **35**; Hegner, **127**; Kudo, **176**; Oehler, **238**.

Economics.—Protozoa in relation to disease.—*General*: Hegner, **129**; Pérard, **252**. *Amoebiasis*: Petzetakis, **254** & **256**. *Malaria*: Yorke & Macfie, **374** & **375**. *Piroplasmosis*: Dschunkovsky & Urodschevich, **80**; Logé & Bizard, **198**; Sergent, Donatien, Parrot, Lestoquard, Plantureux & Rougebief, **300**. "*Anaplasmosis*": Descazeaux, **70**; Koch & Quinlan, **165**; Lestoquard, **185**; Lignières, **194** & **195**; *Microsporidiosis*: Levaditi, Nicolau & Schoen, **186-191**. *Sarcosporidiosis*: Manifold, **205**. *Sporozoa, various*: Archibald & Susu, **9**. *Trypanosomiasis*: Sergent & Donatien, **297**. *Leishmaniasis*: Adelheim, **1**; Montenegro, **219**. *Flagellates*: Dekester & Melnotte, **67**; Delanoë, **68** & **69**; Monfallet, **218**; Kofoid & Swezy, **167**. *Ciliates*: Danisch, **64**; Prytherch, **268**; Treillard & Lwoff, **343**.

Miscellaneous. [Transmission—*vide* under Ethology.] *Cultivation*:—Boeck, **26**; Drbohlav, **79**; Franchini, **101**; Kligler, **161**; Krosz, **174**; Lestoquard, **185**; Lynch, **202**; Napier & Murugesan, **227**; Nesmelow, **231**; Oehler, **237** & **238**; Ponselle, **265**; Robertson, **274** & **275**; Severtzoff, **303**; Shortt & Swaminath, **308**; Thomson, **341**; Yamasaki, **372**; Zotta & Sonia, **380**. *Experimental Infection*:—Donatien & Salord, **75**; Duke, **84**; Levaditi, Nicolau & Schoen, **188** & **190**; Lignières, **195**; Lwoff, **199**; Nicolle & Anderson, **232**; Sellards & Theiler, **295**; Sergent, Donatien & Deguillaume, **299**; Shortt & Swaminath, **307** & **308**; Wagener & Thomson, **354**. *Technique*:—Bresslau & Scremin, **30**; Deschiens, **71**; Epstein, **88**; Foley & Parrot, **97**; Giemsa, **112**; Kaas, **156**; Napier, **226**; Popoff, **266**; Risch, **273**; Schulze, **293**; Schwarz, **294**; Severtzoff, **303**; Sinton, **318**; Taylor & Farber, **339**; Woerdeman, **365**.

STRUCTURE.

Morphology and General Anatomy.—*Sarcodina*:—Arndt, **10**; Kofoid & Swezy, **170**; Leiner, **183**; Pacheco, **243**; Schaeffer, **288**; Stern, **327**. *Sporozoa*:—Bhatia, **22**; Catanei, **40**; Cépède, **42**; Donatien, Lestoquard & Sausseau, **74**; Franchini, **102** & **103**; Jegen, **147**; Leigh-Sharpe, **182**; Lestoquard, **184** & **185**; Poisson, **263**; Sergent, Donatien, Parrot, Lestoquard, Plantureux & Rougebief, **300**; Stephens & Gordon, **326**. *Mastigophora*:—Boeck, **26**; Brumpt, **32** & **33**; Brumpt & Lavier, **36**; Duboscq & Grassé, **81** & **82**; Grassé, **115**; Hartmann, **123**; Jegen, **147**; Kirby, **160**; Knowles & Gupta, **163**; Lavier, **179**; Nieschulz, **234**; Sandon, **284**; Strong, **331**; Troitzkaja, **345**; Wenrich, **358**; Wenyon & Alcock, **361**; Yamasaki, **372**. *Ciliophora*:—Chatton & Lwoff, **49** & **50**; Farkas, **94**; Hentschel, **132**; Mackinnon & Adam, **204**; Morgan, **225**; Stolte, **330**; Wenrich, **359**.

Minute structure: Special Anatomy.—*Shell, envelope*, etc.:—Astre, **12**; Douvillé, **76-78**; Howland, **140**; Jollos, **148** & **149**; Pascher, **248**; Sacco, **281**; Scherffel, **289**; Silvestri, **311** & **314**; Vlerk, **352**; Woloszynska, **366**. *Organellae of locomotion*:—Chatton & Weill, **53**. *Nucleus and cytoplasm*:—Alexeieff, **5**; Bhatia, **22**; Bozler, **27**; Bresslau & Scremin, **30**; Brumpt & Lavier, **36**; Chatton, **47**; Chatton & Weill, **53**; Chatton & Lwoff, **51**; Deschiens, **71**; Hegner, **130**; Hirschler, **136**; Hovasse, **139**; Howland, **143**; Joyet-Lavergne, **150-155**; Kofoid & Swezy, **169-171**; Leiner, **183**; Nieschulz, **234**; Schneider, **291**; Schulze, **293**; Stephens, **324**; Woerdeman, **365**; Young, **376**. *Nuclear division and division-mechanisms*:—Arndt, **10**; Chatton, **47**; Chatton & Lwoff, **51**; Chatton & Weill, **53**; Hovasse, **139**; Ivanić, **146**; Kirby, **160**; Russo, **277** & **278**; Schneider, **291**; Schulz, **292**; Stern, **327**; Taylor, **338**.

PHYSIOLOGY.

General.—Nesmelow, 231; Scarth, 287; Stolte, 330.

Movement.—Galiano, 105; Pantin, 247.

Nutrition, Metabolism.—Bozler, 27; Bresslau, 29; Cleveland, 56; Gard, 106; Hayes, 126; Leiner, 183; Lwoff, 200; Lynch, 201; Naumann, 229 & 230.

Excretion.—Fortner, 98; Gayewskaya, 107; Howland, 142 & 143 Stempell, 323; Young, 316.

Sexuality, Conjugation.—Bělař, 18.

Vitality.—Bercovitz, 19; Moore, 221 & 222; Woodruff & Moore, 369.

Depression, Recuperation.—Bělař, 18; Woodruff & Spencer, 370.

Regeneration. — Hartmann, 124; Moore, 222; Reynolds, 271; Sokoloff, 320.

Life-cycle.—Kepner, 159; Richter, 272.

Environmental Effects: Response to Stimuli.—Bercovitz, 19; Cunningham & Hearne, 60; Efimoff, 87; François-Péréy, 104; Hartmann, 123; Koffman, 166; Mast & Pusch, 211; Moréa, 223 & 224; Napier & Murugesan, 227; Pérard, 252; Popoff & Jeljaskowa, 267; Reynolds, 271; Robertson, 274 & 275; Saunders, 286; Schaeffer, 288; Stempell, 323.

Effects of Reagents, etc.—Bills, 24; Edwards, 86; Kriz, 173; Lewis, 193; Noguchi, 236; Robertson, 275; Schmidt, 290; Swindle & Kriz, 333.

Immunity.—Gedroyc, 109; Kligler & Weitzman, 162; Mazza, 213 & 214; Noguchi, 236; Sergent & Catanei, 296; Sergent & Donatien, 297; Sergent, Donatien & Deguillaume, 299; Sergent, Donatien, Plantureux & Deguillaume, 301; Taliaferro, 335.

REPRODUCTION AND LIFE-CYCLE.

General.—Richter, 272.

Sarcodina.—Hartmann, 124; Kepner, 159; Leiner, 183; Levy, 192; Stern, 327; Taylor, 338.

Sporozoa.—Adie, 2; Adler, 3 & 4; Berlin, 20; Catanei, 40; Davis, 65; Davis & Reich, 66; Dschunkovsky & Urodschevich, 80; Foa, 96; Georgevitch, 110 & 111; Gilchrist, 113; Guyénot & Naville, 120; Hoare, 138; Joyet-Lavergne, 150-153; Kudo, 175 & 177; Lavier, 180; Legroux & Lwoff, 181; Levaditi, Nicolau & Schoen, 186-191; Mackinnon & Adam, 203; Manifold, 205; Paillot, 244 & 245; Pérard, 250 & 251; Phisalix, 257–262; Poisson, 263 & 264; Stankovitch, 321; Stephens & Gordon, 325; Trappmann, 342; Triffitt, 344; Vincent, 348 & 349; Zandt, 378.

Mastigophora.—Boeck, 26: Chagas, 44; Cunningham & Hearne, 60; Duboscq & Grassé, 82; Hegner, 128; Kirby, 160; Reich, 270; Shumway, 309; Strong, 331; Troitzkaja, 345; Tyzzer, 346.

Ciliophora.—Chatton & Lwoff, 50; Moore, 221 & 222; Morgan, 225; Prytherck, 268; Russo, 278 & 279; Sokoloff, 320; Stolte, 330; Treillard & Lwoff, 343; Woodruff & Spencer, 370.

ETHOLOGY.

Bionomics: behaviour, habits. — Chatton & Aubertot, 48; Chatton & Lwoff, 49; Cleveland, 56; Duke, 84; Fantham, 91; Gedroyc, 108; Harnisch, 122; Kofoid & Swezy, 167; Krosz, 174; Labbé, 178; Lynch, 202; Naumann, 229; Rylov, 280; Sandon, 284; Strong, 331; Taliaferro, 337; Wermel, 363.

Plankton.—Ogilvie, 239; Puigaudeau, 269; Terni, 340.

Symbiosis. — Cleveland, 56; Ostroumoff, 240.

Parasitism.—*Natural transmission; infectivity*:—Adie, 2; Anderson, 7; Bhatia, 21; Duke, 83 & 84; Grassi, 116–118; Montenegro, 219; Nicolle & Anderson, 232; Yamasaki, 372; Young, 377; Yorke & Macfie, 373 & 374. "*Carriers*":—Bach, 13; Barrow, 14; Maplestone, 208; Simon, 317. *Relation to host's tissues, etc.*: Chatton & Aubertot, 48; Danisch, 64; Guyénot & Naville, 120; Jegen, 147; Katsunuma, 158; Kudo, 175; Panayotatou, 246;

PÉRARD, 250 & 251; PETZETAKIS, 256; STEPHENS & GORDON, 326; TALIAFERRO, 337.

Parasitism: Hosts.—*Plantae:* STRONG, 331; ZOTTA, 379. *Protozoa*: HOVASSE, 140. *Coelenterata*: CHATTON & LWOFF, 49. *Echinodermata*: HENTSCHEL, 132. *Platyhelminthia*: GUYÉNOT & NAVILLE, 120. *Nematoda*: CHATTON, 46. *Chaetognatha*: HOVASSE, 141. *Annelida*: BERLIN, 20; BHATIA, 22; MACKINNON & ADAM, 204; SHUMWAY, 309. *Crustacea*: ANDRÉ, 8; CHATTON & LWOFF, 49; POISSON, 263 & 264. *Insecta*: BHATIA & SETNA, 23; DUBOSCQ & GRASSÉ, 81 & 82; JEGEN, 147; KIRBY, 160; PAILLOT, 244 & 245; POISSON, 264; STRONG, 331; VINCENT, 348. *Mollusca*: BRAY, 28. *Pisces*: CÉPÈDE, 42; DAVIS, 65; FANTHAM & PORTER, 93; GILCHRIST, 114; STANKOVITCH, 321; STEINMANN, 322; ZANDT, 378. *Amphibia*: BRUMPT, 33; WENRICH, 358, 359. *Reptilia*: GUYÉNOT & NAVILLE, 120; PHISALIX, 257–262. *Aves*: FRANCHINI, 100 & 103; HOARE, 138. *Mammalia*: ADLER, 3; ARCHIBALD & SUSU, 9; BÉDIER, 16; BLACKLOCK & ADLER, 25; BRUMPT, 32; CARINI, 39; CAMERON & MAITLAND, 38; COWDRY & NICHOLSON, 58; CHAGAS, 43; CUNHA & TORRES, 59; DAVIS & REICH, 66; FRANCHINI, 102; HEGNER, 128; LAVIER, 179 & 180; LEVADITI, NICOLAU & SCHOEN, 187–191; SULDEY, 332; TRIFFITT, 344.

VARIATION, PHYLOGENY.

Evolution.—DOUVILLÉ, 76.

Heredity, Variation.—JOLLOS, 148–149; LEVY, 192; REYNOLDS, 271.

Abnormalities.—SACCO, 281.

Phylogeny, Classification.—CHATTON, 46; OZAWA, 242; PASCHER, 248; SCHERFFEL, 289; SILVESTRI, 316; VLERK, 352.

DISTRIBUTION (GEOGRAPHY).

[*See also under* "*Parasitism.*"]

Geographical.—*Europe*: BERLIN, 20; HERDMAN, 133; KOPPE, 172; LABBÉ; 178; LINDEMANN, 196; MONARD, 217; WERMEL, 363; WOLOSZYNSKA, 366–368; ZANDT, 378. *Asia*: FAUST, 95; SKVORTZOW, 319. *Australia*: STICKLAND, 328. *Afria*: SACEGHEM, 283; SERGENT, GUEIDON, BOUGUET & CATANEI, 302. *S. America*: DESCAZEAUX, 70; DIOS & ZUCCARINI, 72; PETROCHI & ZUCCARINI, 253; ESCOMEL, 89. *Arctic*: SANDON, 284. *Atlantic*: CUSHMAN, 61; DOLLFUS, 73; SANDON & CUTLER, 285. *Pacific*: HERON-ALLEN & EARLAND, 134.

Geological. — *General*: CHECCHIA-RISPOLI, 54. *Tertiary and Post-Tertiary*: CLODIUS, 57; CUSHMAN, 62 & 63; DOUVILLÉ, 77; FOSSA-MANCINI, 99; HANNA, 121; HERON-ALLEN & EARLAND, 135; INNOCENTI, 145; KOCH, 164; MARIN & LLUECA, 209; MARTINOTTI, 210; SILVESTRI, 312; VAUGHAN, 347; VLERK, 250–353; WAYLAND & DAVIES, 355; YABE & HANZAWA, 371. *Secondary*: CHAPMAN, 45; HEIM, 131; MENGAUD, 215; SILVESTRI, 315. *Primary*: HAYASAKA, 125; OZAWA, 241; SILVESTRI, 310.

III.—SYSTEMATIC.

1. MYCETOZOA.

[Vacant.]

2. SARCODINA (= GYMNOMYXA)

(a) Amœbaea (Reticulosa + Lobosa).

Rhizopods, coprozoic forms, notes on, KROSZ Arch. Protistenkunde **48** pp. 316–341.

Amoebaea, marine, Tortugas, notes on, with new forms (unnamed), SCHAFFER Carnegie Inst. Year Book **23** pp. 199 & 200.

Amoeba petronijevici **sp. n.**, minute structure, mode of nuclear division, IVANIC Ghlas Srpske Akad **107** pp. 75–89 1 pl. (in Serbian: French summary p. 90).

Cinetidomyxa **gen. n.** (*Proteomyxidae*) *nucleoflagellata* **sp. n.**, minute structure, nuclear division, CHATTON & LWOFF C.R. Soc. Biol. **91** pp. 584–588 6 text-figs.

Councilmania lafleuri, question of its distinction from *E. coli*, KOFOID & SWEZY J. Parasitol. **10** pp. 153–157.—*C. vide Entamoeba.*

Entamoeba barreti **sp. n.**, Tal. & Holmes from *Chelydra serpentina*, TALIAFERRO J. Parasitol. **11** p. 100. —*E. coli* & *Councilmania lafleuri*, distinctions, KOFOID, SWEZY & KESSEL Univ. Calif. Publ. Zool. **26** pp. 21–39 24 text-figs. — *E. coli*, ingestion of red blood corpuscles, LYNCH Amer. J. trop. Med. **4** pp. 43–48.— *E. debliecki* Nieschulz, from pig, further notes on, NIESCHULZ Arch. Protistenkunde **48** pp. 365–370 3 (22) text-figs.—*E. gingivalis*, cytology, comparison with *E. histolytica*, KOFOID & SWEZY Univ. Calif. Publ. Zool. **26** pp. 165–198 pls. xiv–xviii.—*E. vide Councilmania.*

Iodamoeba bütschlii (Prowazek) Dobell, morphology, PACHECO C.R. Soc. biol. **91** pp. 843 & 844.

Karyamoeba falcata **gen.** et **sp. n.**, another alleged new human intestinal Amoeba, KOFOID & SWEZY Univ. Calif. Publ. Zool. **26** pp. 221–242 pls. xxiii & xxiv.

(b) Foraminifera.

Foraminifera (*Chilostomellidae* & *Globigerinidae*), Atlantic Ocean, CUSHMAN Bull. U. S. Nat. Mus. **104** pp. 1–53 8 pls.

Foraminifera, Lord Howe Island, S. Pacific, with new forms, HERON-ALLEN & EARLAND J. Linn. Soc. Zool. **35** pp. 599–647 pls. xxxv–xxvii.

†Foraminifera, Miocene, N. Germany, CLODIUS Arch. Ver. Natg. Mecklenburg **75** pp. 76–145 1 pl.

†Foraminifera, Eocene, California, HANNA Univ. Calif. Publ. Geol. Berkeley **14** 1923 pp. 319–328 pls. lviii & lix.

†Foraminifera, Miocene, Moorabool River, Victoria, HERON-ALLEN & EARLAND J. R. Microsc. Soc. **1924** pp. 121–186 pls. vii–xiv.

†Foraminifera, Vicksburg group (Tertiary) America, CUSHMAN Prof. Pap. U. S. Geol. Survey **133** pp. 11–71 8 pls.

†Foraminifera, Tertiary, Kabu (Java), KOCH Eclog. geol. Helvet. **18** pp. 342–361.

†Foraminifera, Eocene, Barcelona, notes, MARIN & LLUECA Bol. Soc. Espan. Hist. Nat. **24** pp. 201 & 202 pl. vi.

†Foraminifera, Tertiary, Varano (Varesotto), MARTINOTTI Atti Soc. ital. Sci. nat. **62** pp. 317–354 pl. vii.

†Foraminifera, Palaeozoic, Vasciano (Todi), SILVESTRI Boll. Soc. geol. ital. **42** pp. 7–29 pl. i.

†Foraminifera, Cretaceous, Brianza, SILVESTRI Atti Pont. Accad. Nuovi Lincei ser. 2 **5** pp. 31–107 1 pl.

†*Alveolinae*, criteria of, SILVESTRI Atti Pont. Accad. Nuovi Linc. **76** pp. 115–126.

†*Alveolinidae* & *Nummulinidae*, E. Asia, geological distribution, phylogenetic inter-relationships, VLERK Verh. geol.-mijnb. gen. Ned. geol. ser. **5** pp. 329–464 2 pls.

†*Bigenerina ferox* **sp. n.**, Miocene, Victoria, HERON-ALLEN & EARLAND J. R. Microsc. Soc. **1924** p. 140 figs. 15–21.

Bolivina limbata **var. n.** *abbreviata*, S. Pacific, HERON-ALLEN & EARLAND J. Linn. Soc. Zool. **35** p. 623 pl. xxxvi figs. 25–27.

†*B. aspera* **sp. n.**, Miocene, N. Germany, CLODIUS Arch. Ver. Mecklenburg **75** p. 102 fig. 1.—†*B. depressula* p. 19, *caelata* p. 19 pl. ii fig. 2 with **var. n.** *byramensis* p. 19 pl. i fig. 9, **spp. n.** Vicksburg group, CUSHMAN Prof. Pap. U. S. Geol. Surv. **133.**

†*Bulimina convoluta* **var. n.** *dehiscens* Miocene Victoria, HERON-ALLEN & EARLAND J. R. Microsc. Soc. **1924** p. 143 figs. 26–28.—†*B. sculptilis* **sp. n.**, Vicksburg group, CUSHMAN Prof. Papers U. S. Geol. Surv. **133** p. 23 pl. iii fig. 3.

†*Chrysalidina costata* **sp. n.** Miocene, Victoria, HERON-ALLEN & EARLAND J.R. Microsc. Soc. **1924** p. 139 figs. 12–14.

†*Clavulina byramensis* Cushm. **varr. nn.** *extans* pl. ii fig. 6, *turgida* figs. 4, 5, p. 22, CUSHMAN Prof. Papers U. S. Geol. Surv. **133.**

†*Cornuspira obscura* **sp. n.**, Miocene, Victoria, HERON-ALLEN & EARLAND J. R. Microsc. Soc. **1924** p. 134 figs. 3, 4.

Craterites **gen. n.** (*Miliolidae*) *rectus* **sp. n.** Lord Howe Isl. S. Pacific, HERON-ALLEN & EARLAND J. Linn. Soc. Zool. **35** p. 611 pl. xxxv figs. 11, 12.

†*Cristellaria javana* **sp. n.** Tertiary, KOCH Eclog. geol. Helvet. **18** p. 349 text-fig. 6.—†*C. kemperi* p. 323 pl. lix fig. 1, *vacavillensis* p. 324 fig. 4, **spp. n.** Eocene, HANNA Univ. Calif. Publ. Geol. **14**.—†*C. syltensis, lüneburgensis* p. 118 fig. 6, *tenera* p. 119 fig. 7, **spp. n.** Miocene, N. Germany, CLODIUS Arch. Ver. Mecklenburg **75**.—†*C. vicksburgensis* Cushm. **var. n.** *aperta* p. 29 pl. iv fig. 4, CUSHMAN Prof. Pap. U. S. Geol. Surv. **133**.

†*Cycloclypeus martini* **sp. n.** Tertiary, E. Borneo, VLERK Samml. geol. Reichsmus. **10** pp. 138–140 2 pls.

Diffusilina **gen. n.** (*Astrorhizidae*) *humilis* **sp. n.**, S. Pacific, HERON-ALLEN & EARLAND J. Linn. Soc. Zool. **35** p. 614 pl. xxxv figs. 13–16.

Discorbina pyramidalis **sp. n.** p. 634 pl. xxxvii figs. 56–61, *lauriei* **nom. nov.** for *D. tabernacularis* Sideb., p. 633 pl. xxxvi figs. 50–52, pl. xxxvii figs. 53–55, HERON-ALLEN & EARLAND J. Linn. Soc. Zool. **35**.

†*D. margaritifera* p. 167 figs. 71–73, *globigeriniformis* p. 171 figs. 96–98, *inflata* p. 172 figs. 78–84, *haliotis* p. 173 figs. 99–101, **spp. n.**, Miocene, Victoria, HERON-ALLEN & EARLAND J. R. Microsc. Soc. **1924**.

†*Discorbis eximius* **sp. n.**, Vicksburg group, CUSHMAN Prof. Papers U. S. Geol. Surv. **133** p. 38.

†*Ellipsoidina* and related forms, phylogeny, relationships, SILVESTRI Mem. Pont. Accad. Nuovi Lincei Ser. 2 **6** pp. 231–270 1 pl.

†*Fissistomella* **gen. n.** (*Rotalidae*) *fallax* **sp. n.** Miocene, N. Germany, CLODIUS **75** Arch. Ver. Mecklenburg **75** p. 141 fig. 18.

†*Frondicularia australis* **sp. n.** p. 157 figs. 56–58, *compta* var. *villosa* **nom. nov.** p. 157 figs. 54, 55, Miocene, Victoria, HERON-ALLEN & EARLAND J. R. Microsc. Soc. **1924**.

†*Fusulina watanabei* **sp. n.** p. 38 pl. v fig. 1, *F. prisca* **var. n.** *chinensis* p. 36 fig. 2, Carboniferous, Honan, OZAWA Japan J. Geol. Geogr. **2**.

†*Gaudryina advena* **sp. n.**, CUSHMAN Prof. Papers U. S. Geol. Surv. **133** p. 22 pl. iii fig. 1.

†*Hantkenina* **gen. n.** [misprinted *Hantkenia* first reference] (*Rotaliidae*) *alabamensis* p. 3 pl. i & pl. ii fig. 5, *mexicana* p. 3 pl. ii fig. 2, *brevispina* fig. 3, *longispina* fig. 4, p. 2, **spp. n.** Tertiary, Alabama, CUSHMAN Proc. U. S. Nat. Mus. **66** Art. 30.

†*Lagena balaniformis* p. 147 figs. 30, 31, *curvicostata* p. 148 fig. 36, **spp. n.**, *L. orbignyana* **var. n.** *bifida* p. 152 figs. 46–50, Miocene, Victoria, HERON-ALLEN and EARLAND J. R. Microsc. Soc. **1924**.—†*L. pulchra* p. 107, *metzmacheri* p. 108 fig. 2, Miocene, N. Germany, CLODIUS Arch. Ver. Natg. Mecklenburg **75**.—†*L. trigona* **sp. n.**, Java, KOCH Eclog. geol. Helvet. **18** p. 345 text-fig. 2.

†*Marginulina cushmani* **sp. n.**, Eocene, Vacaville, HANNA Univ. Calif. Publ. geol. **14** p. 323 pl. lviii fig. 4.

Miliolina auberiana (d'Orb.) **var. n.** *semireticulata*, HERON-ALLEN & EARLAND J. Linn. Soc. Zool. **35** p. 607 pl. xxxv figs. 8–10.

†*Miogypsina dehaartii* **sp. n.**, Miocene, Larat (Moluccas), VLERK Eclog. geol. Helvet. **18** pp. 429–432 3 text-figs.

†*Neofusinella biconica* **sp. n.**, Carboniferous, Kansas, Bull State geol. Surv. Kansas **9** p. 13 pl. ii figs. 4–7.

†*Nodosarella salmojraghii* **sp. n.**, MARTINOTTI Atti Soc. Ital. Sci. nat. **62** p. 347 pl. vii figs. 58–60 text-fig. **28**.

†*Nodosaria boffalorae* **sp. n.**, Tertiary, p. 333 pl. vii figs. 31–33, MARTINOTTI T.c.—†*N. contorta* **sp. n.** Miocene, N. Germany, CLODIUS Arch. Ver. Mecklenburg **75** p. 113 fig. 3.—†*N. radicula* Linn. **var. n.** *angulata*, p. 347 text-fig. 3, *obliqua* Linn. **var. n.** *torsa* p. 348 fig. 4, *hochstetteri* Schw. **var. n.** *spinicosta* p. 349 fig. 5, Kabu (Java), KOCH Eclog. geol. Helvet. **18**.

†*Nonionina* (?) *clarki* **sp. n.**, Eocene, Vacaville, HANNA Univ. Calif. Publ. geol. **14** p. 324 pl. lix fig. 2.—†*N. perfossa* **sp. n.** p. 144 fig. 19, CLODIUS Arch. Ver. Mecklenburg **75**.

†*Nummulites mengaudi* **sp. n.** Cretaceous, Gers, ASTRE Bull. Soc. géol. France sér. 4 **23** pp. 360–368 pl. xii.—†*N. molli* d' Archiac, notes on, CHECCHIA-RISPOLI Boll. R. Uff. geol. ital.

49 No. 7 pp. 1–8 4 text-figs.—†*N.* early Eocene, Béarn, notes on, DOUVILLE C.R. Acad. Sci. **178** pp. 36–41 14 text-figs.

†*Nubecularia lucifuga* **var. n.** *producta*, Miocene, Victoria, HERON-ALLEN & EARLAND J. R. Microsc. Soc. **1924** p. 130 figs. 1, 2.

†*Orbiculina malabarica* (Cart.) Miocene, Ceylon, note, WAYLAND & DAVIES Q. J. Geol. Soc. **79** p. 591 pl. xxviii figs. 1–4.

†*Orthocyclina* **gen. n.** (between *Orthophragmina* & *Lepidocyclina*), *soeroeanensis* **sp. n.** Tertiary, Java, VLERK Verh. geol.-mijnb. Gen. Ned. Geol. ser. **7** p. 93 1 pl.

†*Orthophragnima*, *ralligstoeckensis* **nom. nov.** for *O. schlumbergeri* Prev. *p.p.*, SILVESTRI Atti Pont. Acc. Nuovi Lincei ser. 2 **5** p. 66. pl. i fig. A.

†*Planorbulina plana* **sp. n.** p. 174 figs. 92–95, *P. larvata* **var. n.** *inaequilateralis* p. 174 figs. 85–90, Miocene, Victoria, HERON-ALLEN & EARLAND J. R. Microsc. Soc. **1924.**

Polymorphina chapmani **sp. n.** Miocene, Victoria, HERON-ALLEN & EARLAND J. R. Microsc. Soc. **1924** p. 163 figs. 60–63.—†*P. megapolitana* p. 126 fig. 9, *parva* p. 127 fig. 10, **spp. n.**, Miocene, N. Germany, CLODIUS Arch. Ver. Mecklenburg **75.**—†*P. regina* P. & J. **var. n.** *rutila*, CUSHMAN Prof. Papers U. S. Geol. Surv. **133** p. 34 pl. v figs. 7, 8.

†*Polystomellina* **subgen. n.** of *Polystomella discorbinoides* **sp. n.**, Tertiary, Japan, YABE & HANZAWA Japan, Journ. Geol. Geogr. **2** p. 99 2 text-figs.

†*Pseudorbitoides* **gen. n.**, *trechmanni* **sp. n.** Cretaceous, Jamaica, DOUVILLE C.R. Soc. Géol. France **1922** pp. 203 & 204.

†*Pulvinulina geinitzi* p. 136 fig. 13, *tangentialis* p. 138 fig. 14, *idae* p. 138 fig. 15, *adolfinae* p. 139 fig. 16, *aequalis* p. 140 fig. 17 **spp. n.**, CLODIUS Arch. Ver. Mecklenburg **75.**—†*P. helicella* **sp. n.** Eocene p. 324 pl. lix fig. 5, HANNA Univ. Calif. Publ. Geol. **14.**—†*P. mariannensis* **sp. n.** p. 44 pl. vii figs. 1–3, CUSHMAN Prof. Pap. U. S. Geol. Surv. **133.**—†*P. scabra* Brady **var. n.** *umbilicata* p. 179 figs. 111–113, Miocene, Victoria, HERON-ALLEN & EARLAND J. R. Microsc. Soc. **1924.**—†*P. tumida* Brady **var. n.** *flexuosa* Java, KOCH Eclog. geol. Helvet. **18** p. 357 text-figs. 9, 10.

†*Quinqueloculina byramensis* **sp. n.**, CUSHMAN Prof. Papers. U. S. Geol. Surv. **133** p. 54 pl. viii fig. 5.

†*Robulina plicata* **sp. n.** Miocene, N. Germany, CLODIUS Arch. Ver. Mecklenburg **75** p. 120 fig. 8.

†*Rotalia advena* **sp. n.** Tertiary, CUSHMAN Prof. Papers. U. S. Geol. Surv. **133** p. 46 pl. vii figs. 4–6.

Spirillina campanula **sp. nov.**, HERON-ALLEN & EARLAND J. Linn. Soc. Zool. **35** p. 628 pl. xxxvi figs. 33–41.

Textularia concava (Karrer), dimorphism, SILVESTRI Atti Pont. Accad. Nuovi Lincei **73** pp. 221–227.

†*T. recta* **sp. n.** p. 17 pl. i fig. 2, *mississippiensis* Cushm. **var. n.** *alabamensis* p. 17 fig. 4, Vicksburg group, CUSHMAN Prof. Papers. U. S. Geol. Surv. **133.**

†*Truncatulina megapolitana* p. 135 fig. 11, *minima* p. 135 fig. 12, **spp. n.**, Miocene, N. Germany, CLODIUS Arch. Ver. Mecklenburg **75.**

†*Uvigerina canariensis* **var. n.** *australis*, Miocene, Victoria, HERON-ALLEN & EARLAND J. R. Microsc. Soc. **1924** p. 164 figs. 67–70.—†*U. javana* **sp. n.**, Tertiary, Kabu, KOCH Eclog. geol. Helvet. **18** p. 353 text-fig. 7.

†*Verneuilina decorata* **sp. n.** Miocene. Victoria, HERON-ALLEN & EARLAND J. R. Microsc. Soc. **1924** p. 138 figs, 7–9.

†*Vulvulina varanica* **sp. n.** Tertiary, MARTINOTTI Atti. Soc. Ital. Sci. Nat. **62** p. 324 pl. vii fig. 7 & text-fig. 3.

(c) Heliozoa.

Orbulinella salina **sp. n.**, Croisic, environmental conditions, LABBÉ Arch. Zool. **62** pp. 467 468 text-fig. viii.

(d) Radiolaria.

[Vacant.]

3. SPOROZOA.

(a) Gregarinidea.

Monocystidae from Swedish Oligochaetes, full account, BERLIN Arch. Protistenkunde **48** pp. 1–124 pls. i–vi.

Anisolobus **gen. n.** (near *Gregarina*) *dacnecola* **sp. n.**, from *Dacne rufifrons*, VINCENT Parasitol. **16** pp. 44–47 3 text-figs.

Caulocephalus crenata **gen. n., sp. n.**, from *Aulacophora*, Punjaub, BHATIA & SETNA Parasitol. **16** p. 284 figs. 12–23.

Cephaloidophora duboscqi **sp. n.** from *Athanas nitescens*, POISSON Bull. Soc. Zool. France **49** p. 244 text-fig. 2 ix–xii.

Gregarina segmentata **sp. n.** from *Cis bidentatus*, VINCENT Parasitol. **16** pp. 296–302 9 text-figs.

Leidyana xylocopae from Lahore, p. 279 text-figs. 1–8, *leptoplanae*, Plymouth, p. 281 figs. 9–11, **spp. n.**, BHATIA & SETNA Parasitol. **16**.

Monocystis caudata p. 14 figs. 1–3, *densa* p. 15, figs. 4–8, *securiformis* p. 16 figs. 9–11, *ventrosa* p. 22 figs. 20–29, 92–120, *acuta* p. 27 figs. 31–35, *hessei* p. 35 figs. 38–41, *wallengrenii* p. 53 figs. 52–55, *polymorpha* p. 58 figs. 56–60, *vivax* p. 60 figs. 61 & 62, *carlgrenii* p. 61 figs. 63–66, *oblonga* p. 66 figs. 67–69, **spp. n.**, diagnoses & Oligochaete hosts, BERLIN Arch. Protistenkunde **48**.

Nematocystis anguillula **var. n.** *gracilis* p. 67 figs. 70–72, from *Lumbricus* spp., BERLIN T.c.

Paraschneideria **gen. n.** for *Schneideria metamorphosa* Nowlin, NIESCHULZ Zool. Anz. **60** p. 150.

Rhynchocystis piriformis **sp. n.** p. 70, figs. 76 & 77, *R. pilosa* **var. n.** *oculata* p. 69 figs. 73 & 74, from *Lumbricus* spp., BERLIN Arch. Protistenkunde **48**.

Stomatophora, notes on morphology of genus, pp. 484–490, *S. simplex* **sp. n.** from *Pherelima rodericensis*, p. 491, comparison with other species, BHATIA Q. J. microsc. Sci. **68** pl. xxiii.

Uradiophora gammari p. 238 text-fig. 1, i–ix, *athanasi* p. 245 text-fig. 2, i–viii, **spp. n.** from Crustacea, POISSON Bull. Soc. Zool. France **49**.

Zygocystis suecica **sp. n.** from *Eisenia foetida*, BERLIN Arch. Protistenkund **48** p. 71 figs. 80 & 81.

(b) Coccidiidea.

Coccidium canna **sp. n.** from eland (*Orias canna*), TRIFFITT J. trop. Med. **27** pp. 223–225 1 pl.—*C. hessei* **sp. n.** from *Rhinolophus hipposideros*, phases of life-cycle, LAVIER Ann. Parasitol. **2** pp. 335–339 3 text-figs.—*C. misgurni* p. 256 text-figs. 1–11, *cobitis* p. 255 figs. 12 & 13, **spp. n.**, hosts & life-cycle, C.R. Soc. Biol. **90**.—*C. perforans*, from rabbit's intestine, & *C. stiedae* from liver, distinct species, characters, mode of separation, PÉRARD C.R. Acad. Sci. **178** pp. 2131–2134, also in Ann. Inst. Pasteur **38** pp. 953–976 7 text-figs.

Cyclospora babaulti **sp. n.** from *Vipera berus*; PHISALIX Bull. Soc. Path. exot. **17** pp. 868–871 15 text-figs.—*C. tropidonoti* **sp. n.** from *T. natrix*, life-cycle; ID. T.c. pp. 871–873 10 text-figs.—*C. scinci* **sp. n.** from *S. officinalis*, different stages in life-cycle, PHISALIX Bul. Mus. **1924** pp. 100 & 101.—*C. zamenis* **sp. n.** from *Z. viridiflavus*, PHISALIX T.c. pp. 501 & 502.—*C. viperae* Phis., gametogenesis; ID. t.c. pp. 497–500 4 text-figs.

Eimeria, *vide Coccidium*.

Isospora viverrae **sp. n.**, life-cycle, ADLER Ann. trop. Med. Parasitol. **18** pp. 87–94 pl. v.

(c) Haemosporidia.

Haemosporidia, various, from Italian birds, notes, FRANCHINI Ann. Inst. Pasteur **38** pp. 470–515 many text-figs.

A Haemosporidian of uncertain nature, from red blood corpuscles of *Hypolais*, note on; FRANCHINI Bull. Soc. Path. exot. **17** pp. 884 & 885 1 text-fig.

Halteridium columbae, life-cycle in *Lynchia*, transmission; ADIE Bull. Soc. Path. exot **17** pp. 605–613 2 pls.

Haemogregarina sternothoeri **sp. n.** from *S. derbianus*, notes; PHISALIX Bul. Mus. **1924** p. 102.

Hepatozoon adiei **sp. n.** from Indian eagle, morphology, schizogony; HOARE Trans. R. Soc. trop. Med. **18** pp. 63–66 1 pl.

Laverania malariae, cytological peculiarities in certain parasites, STEPHENS Ann. trop. Med. Parasitol **18** pp. 33–35 pls. ii & iii.

Leucocytozoon spp. from Italian birds, morphology, schizogony described, FRANCHINI Ann. Inst. Pasteur 38 pp. 479–500 11 text-figs.

Malarial parasites comparative account of the three types, typical and atypical forms; CATANEI Arch. Inst. Pasteur Alger **1** pp. 10–108 pls. i–iii.—Malarial parasites, discussion of unicity hypothesis, regarded as untenable, YORKE & MACFIE Trans. R. Soc. trop. Med. **18** p. 20: and Lancet **1924** i p. 1017.

Nuttallia legeri **sp. n.** from *Herpestes galera*, BÉDIER C.R. Soc. Biol. **90** pp. 415–417.—*N. equi* from mules, Poitou, note on morphology, DONATIER, LESTOQUARD & SAUSSEAU T.c. pp. 1308–1310 1 text fig.—*N. myoxi* **sp. n.** morphology, FRANCHINI Bull. Soc. Path exot. **17** pp. 881–884 12 text-figs.

Piroplasma (*Babesiella*) *berbera* **sp. n.** morphology, SERGENT, DONATIEN, PARROT, LESTOQUARD PLANTUREUX & ROUGEBIEF Ann. Inst. Pasteur **38** p. 283 text-fig. 5.—*P. caballi* from equines in W. France, LOGÉ & BIZARD Bull. Soc. Path. exot. **17** pp. 347–354.

Piroplasmata and bovine piroplasmosis, Algeria, account of, SERGENT, DONATIEN, PARROT, LESTOQUARD, PLANTUREUX & ROUGEBIEF Ann. Inst. Pasteur **38** pp. 273–343 38 text-figs.—Piroplasmata (*Babesiella*, *Gonderia* & *Theileria*) of sheep, Algeria, note, LESTOQUARD Bull. Soc. Path-exot. **17** pp. 122–128 15 text-figs.

Plasmodium agamaoe (Wenyon, 1908), fuller account of endogenous cycle, removal from genus *Halteridium*, ADLER Ann. trop. Med. Parasitol. **18** pp. 131–133 14 text-figs.—*P. reichenowi* **sp. n.** a malarial parasite of chimpanzees, BALCKLOCK & ADLER Ann. trop. Med. Parasitol **18** p. 2.—*P. vide etiam* under *Laverania*.

Theileria general review of genus and contained species, BRUMPT Ann. Parasitol. 2 pp. 340–353 3 text-figs.—*T. dispar* **sp. n.** Algeria morphology, transmission, SERGENT, DONATIEN, PARROT, LESTOQUARD, PLANTUREUX & ROUGEBIEF Ann. Inst. Pasteur **38** p. 297 text-figs. 31, 32.—*T. hirci* **sp. n.** from goats, Serbia, morphology and stages in life-cycle, DSCHUNKOVSKY & URODSCHEVICH Parasitol **16** p. 108 text-fig. 1.

(d) Myxosporidia.

Myxosporidia, general scheme of life-cycle, GEORGEVITCH C.R. Soc. Biol. **90** pp. 1085–1087.

Myxosporidia from Fishes, Lake Constance, notes; ZANDT Centralbl. Bakt. Abt. 1 **92** Orig. pp. 246–256 text-figs. 16–27.

Chloromyxum incertum **sp. n.** from *Thymellus vulgaris*, ZANDT C.B. Bakt. Abt. 1 **92** Orig. p. 248 text-fig. 18.—*C. thyrsites* **sp. n.** from *Thyrsites arun*, notes on life-history, structure of spores, GILCHRIST Trans. R. Soc. S. Africa **11** pp. 263–273 7 text-figs.

Unicapsula **gen. n.** *muscularis* **sp. n.** from "wormy" halibut, DAVIS Rep. U. S. Fish. Comm. **1923** Appendix 8 5 pp.

Allied to Myxosporidia:—

Mrazekia niphargi **sp. n.** from *N. stygius*, POISSON C.R. Acad. Sci. 178 p. 666 text-figs. 16 & 17.—*M. piscicola* **sp. n.** from *Gadus merlangus*, description of spore, CÉPÈDE Bull. Soc. Zool. France **49** pp. 109–113 4 text-figs.

(e) Microsporidia.

Microsporidia, comprehensive bionomic and taxonomic account of known forms, KUDO Illinois Biol. Monogr. **9** Nos. 2 & 3 pp. 1–268 27 pls.

Negri-bodies of hydrophobia regarded as representing the pansporoblasts of a Microsporidian, of the type of *Encephalitozoon*, LEVADITI, NICOLAU & SCHOEN C.R. Acad.Sci. **178** pp. 256–258.

Encephalitozoon cuniculi, account of, DA FANO J. Path. Bact. **27** pp. 333–336 pls.xxvi & xxvii.—*E. c.* further account of spore-structure and development:

occurrence also in mice, LEVADITI, NICOLAU & SCHOEN C.R. Soc. Biol. **90** pp. 662–666 3 text-figs.—*E. rabiei* **sp. n.** parasite of hydrophobia, MANOUCHAN & VIALA C.R. Acad. Sci. **178** pp. 344 & 345, and Ann. Inst. Pasteur **38** pp. 258–267 pls. iii–vi.

Glugea encyclometrae **sp. n.** (perhaps syn. *G. danilewskyi* L. Pfr.) and *G. ghigii*, Trematode hosts, and relation to *Tropidonotus*, the vertebrate host, notes on life-cycle, GUYÉNOT & NAVILLE Rev. Suisse Zool. **31** pp. 75–115 pls. ii & iii and 11 text-figs.—*G. lyssae* **sp. n.** name proposed for alleged Microsporidian parasite of hydrophobia [in any case, it is antedated by *Enceph. rabiei* Man. and Viala], LEVADITI, NICOLAU & SCHOEN C.R. Soc. Biol. **90** pp. 398–402.

Nosema adiei, Christophers, note on, SHORTT & SWAMINATH Ind. J. Med. Res. **12** pp. 181–183 pl. xiii.—*N. apis* Zander, account of life-cycle and spores, TRAPPMANN Arb. biol. Anst. **11** pp. 609–622 1 pl.—*N. bombycis*, discussion of certain points in life-cycle, FOA Atti Acad. Lincei **33** i pp. 97–100.

Perezia pieris **sp. n.** note on life-history, PAILLOT C.R. Soc. Biol. **90** pp. 1255–1257 1 text-fig.

Thelohania legeri Hesse = *T. illinoisensis* Kudo, from mosquitoes, relation to host, development, KUDO Arch. Protistenkunde **49** pp. 147–162 pl. vii.—*T. mesnili* **sp. n.** from *Pieris brassicae*, note on life-cycle, PAILLOT C.R. Soc. Biol. **90** pp. 501–503 1 text-fig.—*T. opacita* Kudo, from Culicine mosquitoes, life-cycle, KUDO J. Parasitol. **11** pp. 84–89 pl. xvii.—*T. vandeli* **sp. n.** from *Niphargus*, POISSON C.R. Acad. Sci. 178 p. 666 text-figs. 13–15.

Toxonema mercieri **sp. n.** from *Notonecta viridis*, POISSON C.R. Ac. Aci. **178** pp. 664–666 text-figs. 1–12.

(f) Actinomyxidia.

Triactinomyxon Stolc, *legeri* **sp. n.** from *Tubifex*, life-cycle, comparison with other forms, MACKINNON & ADAM Q. J. microsc. Sci. **68** pp. 187–209 pls. vi–viii.

(g) Sarcosporidia.

[Vacant.]

(h) Haplosporidia.

[Vacant.]

SPOROZOA INCERTAE SEDIS.

[Various and doubtful.]

A Sporozoon, of uncertain nature, from case of splenomegaly, Sudan, merozoite-like bodies described, ARCHIBALD & SUSU Trans. R. Soc. Trop. Med. **17** pp. 482–484 2 pls.

Sporozoan-like parasites from brain in spontaneous encephalitis of rabbits, CAMERON & MAITLAND J. Path. Bact. **27** p. 331. [*Vide etiam Encephalitozoon.*]

Sporozoan-like parasites from brain in cases of meningo-encephalitis in mice, described, COWDRY & NICHOLSON J. exp. Med. **40** pp. 51–62 pls. iii & iv.

"*Anaplasma*" *ovis* **sp. n.** Algeria, LESTOQUARD Bull. Soc. Path. exot. **17** pp. 784–788.

Globidium tatusi **sp. n.** from an Armadillo, CUNHA & TORRES C.R. Soc. Biol. **90** p. 242.

Grahamella acodoni **sp. n.** from field rat (*A. serrensis*), CARINI Ann-Parasitol. **2** p. 253.

Polythei helodrili **gen.** et **sp. n.** from *H.* (*Allolobophora*) *longus*, perhaps allied to *Toxosporidium*, LEIGH-SHARPE Ann. Mag. Nat. Hist. ser. 9 **13** pp. 553 & 554 1 fig.

4. MASTIGOPHORA.

(a) Flagellata.

Flagellates, new or little known forms, notes, PASCHER Arch. Protistenkunde **48** pp. 492–508 19 text-figs.

Flagellates, Lakes of E. Holstein and Constance, notes, KOPPE Arch. Hydrobiol. **14** pp. 619–672 pl. viia.

Various Flagellates, regarded as distinct genera (*e.g.*, *Trimitus*, *Tricercomonas*, *Enteromonas*, *Dicercomonas*) probably only young forms of certain *Tetramitidae*, DUBOSCQ & GRASSÉ C.R. Soc. Biol. **90** p. 1445.

Allantion **gen. n.** (probably near *Helkesimastix*) *tachyploon* **sp. n.**, SANDON J. Linn. Soc. Zool. **35** p. 461 pl. xxiv figs. 11, 12.

Amphitropis **gen. n.** Gicklhorn *aequiciliata* & *biciliata*, **spp. n.**, Gicklhorn, notes, PASCHER Arch. Protistenkunde **48** pp. 506, 508, text-figs. 18, 19.

Anisonema minus **sp. n.**, Spitsbergen, W. Indies, SANDON J. Linn. Soc. Zool. **35** p. 462 p. xxiv fig. 13.

Astasia elongata text-fig. A2, *oblonga* fig. A3 *variabile* fig. A4 p. 182, **spp. n.**, *inflata* Duj. **var. n.** *hyalina* p. 181 fig. A1, N. Manchuria, SKVORTZOW Arch. Protistenkunde **48**.

Bodo (= *Prowazekia*) *cruzi*, conjugation described, CHAGAS C.R. Soc. Biol. **91** pp. 988–990, 11 text-figs.—*B.* (cf. *edax*) from human saliva, note on, KNOWLES & GUPTA Ind. J. Med. Research **11** pp. 737–741 11 text-figs.—*B. profundus* **sp. n.** E. Holstein, KOPPE Arch. Hydrobiol. **14** p. 647 fig. 9.

Crithidia haematopotae **sp. n.** from *H.* and also *Stomoxys*, JEGEN Zool. Jahrb. Anat. **46** p. 403 figs.

Dinenympha fimbriata **sp. n.** from *Reticulotermes*, structure, division, KIRBY Univ. Calif. Publ. Zool. **26** pp. 199–220 pls. xix–xxii.

Euglena limosa **sp. n.**, morphology, physiology, GARD Bull. Soc. Bot. France **69** pp. 184–196, 241–250, 306–313.—*E. sima* **sp. n.** Russia, WERMEL Arch. Protistenkunde **48** p. 205 text-fig. 9.

Euglenamorpha **gen. n.** *hegneri* **sp. n.** with **var. n.** *pellucida*, a Euglena-like parasite of tadpoles, WENRICH Biol. Bull. **47** pp. 149–174 4 pls.

Giardia vide Lamblia.

Hegneria **gen. n.** (**fam. n.** *Hegneridae*) *leptodactyli* **sp. n.** from *L. ocellatus*, Brazil, morphology, relationships to Euglenidina, BRUMPT & LAVIER Ann. Parasitol. **2** pp. 248–252 2 text-figs.

Herpetomonas muscarum (Leidy) correct name for Flagellate of house-fly and not *H. muscae-domesticae* (Burnett), HOARE Trans R. Soc. trop. Med. **17** pp. 403-406.

Histomonas meleagridis, amoeboid and flagellate stages, TYZZER J. med. Research **44** pp. 676 & 677.—*H. m.* cultivation, DEBOHLAV T.c. p. 677.

Janickiella grassii, Dub. & Gras., morphology, developmental forms, DUBOSCQ & GRASSÉ C.R. Soc. Biol. **90** pp. 1142–1445 10 text-figs.

Lagynion subsphaericum text-fig. 2, *hemisphaericum* p. 19 text-fig. 1, *clavatum* fig. 3, *ovale* fig. 4, *reniforme* fig. 5, *urceolatum* fig. 6, *triquetrum* fig. 7, p. 20, **spp. n.**, Aneboda, NAUMANN K. Svenska Vet.-Akad. Handl. **62** No. 4.

Lamblia (*Giardia*) *caprae* Niesch, morphology, NIESCHULZ Arch. Protistenkunde **49** pp. 278–286 4 text-figs.—*L. muris* and *simoni* **sp. n.** of rats, morphology compared, & with *intestinalis* of man, LAVIER Ann. Parasitol. 2 pp. 161–168 14 text-figs.

Leishmania americanum & *tropica*, question of specific distinctness, MONTENEGRO Amer. J. trop. Med. **4** pp. 331–340.—*L. donovani* & *L. fasciculata*, nuclear division compared, SCHULZ Arch. Protistenkunde **49** pp. 216–236 p. ix.—*L. donovani*, behaviour of cultural forms in bed-bugs, different species, SHORTT & SWAMINATH Ind. J. Med. Research **12** pp. 391–396 pls. xxi–xxiii.—*L.* regarded as inclusive in the genus *Herpetomonas*, MONFALLET An. zool. aplic. **8** p. 9.

Leptomonas denticis **sp. n.** from *Dentex argyrozona*, blood, FANTHAM & PORTER Trans. R. Soc. S. Africa **12** p. lxi.—*L. stomoxyae* **sp. n.** from *S. calcitrans*, JEGEN Zool. Jahrb. Anat. **46** p. 393 figs.—*L.* sp. from a marine Nematode, and the question of the origin of the Trypanosomids, CHATTON C.R. Soc. Biol. **90** pp. 780–783.—*L.* sp. from Euphorbias, occurrence in *Chariesterus cuspidatus* & *Cnemidophorus lemniscatus* also, transmission, morphology, adaptations, STRONG Amer. J. trop. Med. **4** pp. 345–385 6 pls.—*L.* sp. from *Cynanchum acutum* (Asclepiad) in Roumania, ZOTTA C.R. Soc. Biol. **90** pp. 141–143.

Mallomonas quadricornis text-fig. 4, *fusiformis* fig. 1, p. 204, *moskowensis* p. 205 fig. 3, **spp. n.**, Russia, WERMEL Arch. Protistenkunde **48**.

Menoidium schewiakoffi text fig. A 8, *tremulum* fig. A9, **spp. n.**, *falcatum* Zach. **var. n.** *minor* p. 183, SKVORTZOW Arch. Protistenkunde **48**.—*M. semilunaris*

text-figs. 5, 8, with **var. n.** *regularis* fig. 6, *distractum* fig. 2 p. 206, **spp. n.**, Russia, WERMEL Arch. Protistenkunde **48.**

Octomastix parvus Alex. from *Emys orbicularis*, morphology, GRASSÉ C.R. Soc. biol. **91** pp. 439–442 8 text-figs.

Pentatrichomonas ardin-delteili, note on morphology, bionomics, KOFOID & SWEZY Amer. J. trop. Med. **4** pp. 33–41.

Petalomonas angusta **var. n.** *ovalis* p. 186 text-fig. B8, SKVORTZOW Arch. Protistenkunde **48.**

Phaeogloea **gen. n.** (Chrysomonadina) *mucosa* Chodat, note on, PASCHER Arch. Protistenkunde **48** p. 493 text-fig. 2.

Phalansterium solitarium **sp. n.**, SANDON J. Linn. Soc. Zool. **35** p. 463 pl. xxiv figs. 14, 15 & text-figs. 1, 2.

Sainouron **gen. n.** *mikroteron* Spitsbergen and widespread p. 459 pl. xxiv figs. 1–6, *oxu* Spitsbergen p. 460 figs. 7–10, **spp. n.**, SANDON J. Linn. Soc. Zool. **35.**

Trachelomonas longicollis **sp. n.** p. 206 text-fig. 7, WERMEL Arch. Protistenkunde **48.**—*T. tympanum* **sp. n.** p. 505 text-fig. 16, PASCHER Arch. Protistenkunde **48.**

Trepomonas agilis Duj., as a coprozoic Flagellate in human stool, WENYON & ALCOCK Trans. R. Soc. trop. Med. **18** p. 9 3 text-figs.

Tricercomonas intestinalis Weny. and O'Con., morphology, cultivation, division, BOECK Amer. J. trop. Med. **4** pp. 519–535 1 pl.

Trichomonas dogieli syn. of *Janickiella grassii*, DUBOSCQ & GRASSÉ C.R. Soc. Biol. **90** p. 1445.—*T. trypanoides* **sp. n.** from *Reticulitermes lucifugus*, morphology, comparison with other forms, DUBOSCQ & GRASSÉ C.R. Soc. Biol. **90** pp. 547–550 5 text-figs.

Trypanoplasma sagittae **sp. n.** from *S. bipunctata*, HOVASSE C.R. Soc. biol. **91** pp. 1254 & 1255.

Trypanosoma crocidurae **sp. n.** from *C. russulus*, BRUMPT Ann. Parasitol. **1** pp. 262–264 2 text-figs.—*T. cruzi* from *Chrysothrix sciureus* distinct from *T. prowazeki*, CHAGAS C.R. Soc. Biol. **90** pp. 873–876 4 text-figs.—*T. berberum* distinct from *T. brucei*, according to immunity tests, SERGENT, DONATIEN, PLANTUREUX & DEGUILLAUME Bull. Soc. Path. exot. **17** pp. 130 & 131.—*T. brucei*, considered to have a filterable stage [but the author is not implying that this necessarily connotes an "ultra-microscopic" or granule phase], REICH J. Parasitol. **10** pp. 171–181.—*T. rhodesiense*, regarded as a distinct species, BRUMPT Ann. Parasitol. **2** pp. 254–273 3 text-figs.—*T. sergenti* p. 338 text-fig. 1, *parroti* p. 340 fig. 2, **spp. n.** from *Discoglossus pictus*, BRUMPT Ann. Parasitol **1.**

Urceolus pascheri text-fig. B6, *gobii* fig. B5, p. 184 **spp. n.**, SKVORTZOW Arch. Protistenkunde **48.**

Uroglenopsis americana (Calkins) Lemm., morphology and life-history, TROITZKAJA Arch. Protistenkunde **49** pp. 260–277 13 text-figs.

(b) Silicoflagellata.

[Vacant.]

(c) Dinoflagellata.

Amphidinium flexum, text-figs. 3, 4, *semi-lunatum* fig. 7, p. 59, **spp. n.**, Port Erin, HERDMAN Proc. Trans. Liverpool Biol. Soc. **38.**—*A. testudo* p. 76 text-figs. 2–5, *bipes* p. 78 fig. 19, *ovum* p. 78 fig. 25, *mannanini* fig. 21, *vitreum* fig. 22 p. 79, **spp. n.**, HERDMAN T.c.

Ceratium spp. Bay of Croisic, notes, PUIGAUDEAU Bull. Soc. Zool. France **48** pp. 351–362.

Chalubinskia **gen. n.** (Peridinida) *tatrica* **sp. n.** Poland, WOLOSZYNSKA Bull. Acad. Cracovie **1915** B p. 276 pl. xiii figs. 1–8.

Cystodinium steinii Klebs **forma n.** *tenuirostris*, Tatra, WOLOSZYNSKA *op. cit.* **1918** B p. 198 pl. xiv fig. 20.

Glenodiniopsis **gen. n.** (Peridinida) *steinii* p. 278 pl. xi figs. 30–36, *polonicum* p. 279 pl. xiii figs. 15–21, **spp. n.**, Poland, WOLOSZYNSKA op. cit. **1915** B.

Glenodinium monense **sp. n.** Port Erin, HERDMAN Proc. Trans. Liverpool Soc. **38** p. 58 text fig. 1.

Gonyaulax polonica **sp. n.**, WOLOSZYNSKA Bull. intern. Acad. Cracovie **1915**B p. 265 pl. x, figs. i–ix.

Gymnodinium hiemale p. 118 pl. xi fig. 4, *leopoliense* p. 119 pl. xi fig. 6, pl. xiii figs. C–E, *coronatum* p. 120 pl. xi figs. 10–19 pl. xiii figs. I–L, N, with **var. n.** *glabra* p. 121 pl. xi figs. 20, 21, **spp. n.**, WOLOSZYNSKA Bull. Acad. Cracovie **1917**B.—*G. tatricum* **sp. n.** p. 198, ID. *op. cit.* **1918**B.—*G. variabile* text-figs. 35–45, *incertum* fig. 32, p. 80, *glandula* figs. 30, 31, *lebourae* fig. 28 p. 81, **spp. n.**, Port Erin, HERDMAN Proc. Trans. Liverpool Biol. Soc. **38**.

Haplozoon Dogiel, life-history and systematic position, pp. 59–74, pls. xv & xvi, *H. dogieli* **sp. n.** from *Leiochone* p. 61, SHUMWAY J. Parasitol. **11**.

Kolkwitziella salebrosa Lind. **var. n.** *gibbera*, LINDEMANN Arch. Protistenk. **49** p. 439 pl. xxi figs. 7–10.

Peridinium chalubinskii **sp. n.** Tatra, WOLOSZYNSKA Bull. Acad. Cracovie **1918**B p. 199 pl. xiv figs. 1–6.—*P. goslaviense* pl. x figs. 18–24, *lomnickii* figs. 25–29, p. 267, with **var. n.** *splendida* p. 268 figs. 30–40, *wierzejskii* p. xi figs. 1–8 with **var. n.** *minor* fig. 9, *tatricum* figs. 10–18 p. 269, with **var. n.** *spinulosa* p. 270 figs. 19–25, *polonicum* pl. xii figs. 1–10, *dzieduszyckii* figs. 16–20 p. 271, *lubieniense* figs. 21–24, *kulczynskii* figs. 25–31 p. 272, *dybowskii* p. 273 pl. xiii figs. 9–14, *godlewskii* p. 274 figs. 31–36, **spp. n.** Poland, *P. marchicum* Lemm. **var. n.** *simplex* p. 266 pl. x figs. 10–17, WOLOSZYNSKA *op. cit.* **1915**B.—*P. gracile* p. 2 pl. i figs. 3–6, *incurvum* p. 2 figs. 7–9, *limnophilum* p. 3, figs. 10–13 (apparently syn. *Peridiniopsis rotunda* Lebour), **spp. n.**, *P. divergens* var. δ-*travectum* **var. n.** Finland, LINDEMANN Arch. Hydrobiol. **15**.—*P. lomnicki* **var. n.** *punktulatum*, LINDEMANN Arch. Protistenk, **47** p. 434 pl. xxi figs. 1–6.—*Phalacroma ebriola* **sp. n.** Port Erin, HERDMAN Proc. Trans. Liverpool Biol. Soc. **38** p. 79 text-fig. 24.

Polykrikos lebourae **sp. n.** Port Erin, HERDMAN T.c. p. 60 text-fig. 6.

Raciborskia **gen. n.** (Peridinida) *bicornis* **sp. n.** Tatra, WOLOSZYNSKA Bull. Acad. Cravovie **1918**B p. 199 pl. xiv figs. 15–17.

Sphaerodinium **gen. n.** (Peridinida) p. 279 *polonicum* **sp. n.** p. 280 pl. xiv figs. 1–22 with **var. n.** *tatrica* p. 280 fig. 23, *limneticum* p. 281 figs. 24, 25, *cracoviense* p. 281 figs. 28–30, WOLOSZYNSKA *op. cit.* **1915** B.

Spirodinium vorticella **sp. n.** p. 117 pl. xii figs. 19–22, pl. xiii figs. F.–H., WOLOSZYNSKA *op. cit.* **1917** B.

Staszicella **gen. n.** (Peridinida) p. 277, *dinobryonis* **sp. n.** p. 278 pl. xii figs. 32–40, WOLOSZYNSKA *op. cit.* **1915** B.

Syndinium vernale **sp. n.** extracapsular parasite of *Collozoum inerme*, distinctions from *S. brandti*, HOVASSE Bull. Soc. zool. **48** p. 337.

(d) Rhynchoflagellata.

[Vacant.]

5. CILIOPHORA (INFUSORIA).

(a) Ciliata.

Astomatous Ciliates, various, from Oligochaetes, re-described, MACKINNON & ADAM, Q. J. Microsc. Sci. **58** pp. 211–228 pl. ix.

Infusorian parasites of African antelopes, descriptive notes, BUISSON Ann. Parasitol. **2** pp. 155–160 10 text-figs.

Ciliate, sp. indet., from gill chambers of wood-boring Mollusc, *Bankia*, note on, BRAY Trans. Amer. Microsc. Soc. **43** pp. 172 & 173 2 text-figs.

Amphileptus branchiarum **sp. n.** from gills of tadpoles, WENRICH Trans. Amer. Microsc. Soc. **43** pp. 191–199 pls. ix & x.

Balladina ovata **sp. n.** Astroni, TAGLIANI Ann. Mus. Zool. Univ. Napoli **5** No. 3 p. 4 text-fig. 1.

Blepharisma undulans Stein, morphological & physiological study, STOLTE Arch. Protistenkunde **48** pp. 245–301 pls. x–xii.

Collinina **nom. nov.** for *Collinella* Chatt. et Pérard, praeocc., CHATTON & PÉRARD Bull. Soc. Zool. France **49** p. 347.

Cryptochilum boreale **sp. n.** from *Echinus esculentus*, morphology, notes on other Ciliates from Echinoids, HENTSCHEL Parasitol. **16** pp. 321–328 3 text-figs.—*C. echini*, gametogenesis & conjugation, RUSSO Atti Accad. Lincei **33** i pp. 377–383 6 text-figs. & *op. cit.* **33** ii pp. 230–236 3 text-figs.

Cyclochaeta salmonicida **sp. n.** ectoparasitic on rainbow-trout, STEINMANN Rev. Hydrobiol. **2** p. 208 1 fig.

Diplodinium hamatum **sp. n.** p. 656 text-figs. 2–4, 7–13, and other *Ophryoscolecidae*, digestive system described, SCHULZE Zs. Morph. Ökol. Tiere **2** pp. 656–665.

Glaucoma piriformis in body-cavity of *Chironomus* larvae, pathogenicity, nutrition, conjugation, TREILLARD & LWOFF C.R. Acad. Sci. **178** pp. 1761–1764.

Hoplitophrya tubificis **sp. n.**, MACKINNON & ADAM Q. J. microsc. Sci. **68** p. 220 pl. ix figs. 13–16.

Hypocomella **gen. n.** proposed for *Hypocoma cardii*, CHATTON & LWOFF C.R. Acad. Sci. **178** p. 1930.

Hypocomina **gen. n.** proposed for *Hypocoma patellarum*, CHATTON & LWOFF C.R. Acad. Sci. **178** p. 1930.

Opalina japonica Sugiyama *non* Metcalf, METCALF Science **59** p. 64.

Pigostyla **gen. n.** for *Balladina viridis* Penard, TAGLIANI Ann. Mus. Zool. Univ. Napoli **5** No. **3** p. 7.

Spirophrya **gen. n.** (compared with *Polyspira* and *Gymnodinioides*) *subparasitica* **sp. n.**, morphology, life-cycle, peculiar adaptation to hosts, CHATTON & LWOFF C.R. Acad. Sci. **178** pp. 1642–1644.

Vorticella aldobrandina **sp. n.**, KAAS Atti Pont. Accad. Nuovi Lincei **74** p. 32.

(b) Suctoria (Tentaculifera.)

Choanophrya infundibulifera Hartog, anatomy, FARKAS Arch. Protistenkunde **48** pp. 125–135 pl. vii.

III. PORIFERA OR SPONGIDA

ARRANGED BY

H. M. WOODCOCK, D.Sc. (Lond.).

CONTENTS

	PAGE
I. Titles	1
II. Subject Index	2
III. Systematic	2

I.—TITLES.

Branson, E. B. *vide* Tansey, V. O.

1.—Brøndsted, H. V. Sponges from the Auckland and Campbell Islands. Videns. Medd. Kjöbenhavn **75** 1924 pp. 117–167 36 text-figs.

2.—Brøndsted, H. V. Sponges from New Zealand, Part I. (Papers from Dr. Th. Mortensen's Pacific Expedition, 1914–1916.) Videns. Medd. Kjöbenhavn **77** 1924 pp. 435–483 34 text-figs.

3.—Burton, M. The genus *Chondrilla*. Ann. Mag. Nat. Hist. London Ser. 9 **14** 1924 pp. 206–209.

4.—Clarke, J. M. A colossal Devonian glass sponge. New York State Mus. Bull. Albany No. **251** 1924 pp. 121 & 122 3 pls.

5. —Dendy, A. Porifera. Pt. 1.—Non-Antarctic Sponges. Brit. Antarctic ("Terra Nova") Exped. 1910 Zoology vol. **6** No. 3 1924 pp. 269–392 15 pls.

6.—Dendy, A. On an orthogenetic series of growth-forms in certain Tetraxonid sponge spicules. Proc. Roy. Soc. London **B 97** 1924 pp. 243–250 pls. x & xi.

7.—Dendy, A. and **Frederick,** L. M. On a collection of Sponges from the Abrolhos Islands, Western Australia. J. Linn. Soc. Zool. London **35** 1924 pp. 477–519 pls. xxv & xxvi.

8.—Dollfus, R. P. Contribution à la faune des Invertébrés du banc de Rockall. (Matériaux récoltés par M. G. Hamel pendant la croisière du Pourquoi-Pas ? sous le commandement du Dr. J. B. Charcot.) Bul. Inst. Océan. Monaco **438** 1924 pp. 1–25. [Sponges determined by **Topsent.**]

Frederick, L. M. *vide* Dendy, A.

9.—Fritsche, C. H. Beiträge zur Geologie und Paläontologie von Südamerika. XXVII. Neue Kreidefaunen aus Südamerika (Chile, Bolivia, Peru, Colombia). Neues Jahrb. Min. Geol. Paläont. Stuttgart **50** Beilage-Bd. 1924 pp. 313–334 pls. i–iv.

11.—Holtz, F. Ueber den biologischen Abbau des Arginins. Verh. physik.-med. Ges. Würzburg **49** 1924 p. 5.

11.—Orton, J. H. An experimental effect of light on the sponge, *Oscarella*. Nature London **113** 1924 pp. 924 & 925.

12.—Resvoy, P. (Note on a small collection of sponges from the Volga river and its basin.) [Russian and English summary.] Arb. biol. Wolga-Station Saratow **7** 1923 pp. 68–71.

13.—Schrammen, A. Die Kieselspongien der oberen Kreide von Nordwestdeutschland. III und letzter Teil. Mit Beiträgen zur Stammgeschichte. Monogr. Geol. Palaeontol. Berlin ser. **1** H. **2** 1924 pp. 1–159 17 pls.

14.—Sherborn, C. D. Index Animalium 1801–1850. Parts IV & V. London (British Museum Trustees) 1924 pp. 641–943, 944–1196.

15.—Smith, F. Data on the distribution of Michigan fresh-water sponges. Papers Michigan Acad. Sci. New York **1** 1923 pp. 418–421.

16.—Tansey, V. O. The Fauna of the Bailey Limestone, etc. (In: The Devonian of Missouri by E. B. **Branson.**) Miss. Bur. Geol. **1922** pp. 166–212 many pls.

17.—Topsent, E. L'état jeune des Ectyonines. C.R. Acad. Sci. Paris **178** 1924 pp. 141–143.

Topsent, E. *vide* Dollfus, R. P.

18.—Wierzejski, A. Beobachtungen über die Entwicklung der Gemmulae der Spongilliden und des Schwammes aus den Gemmulis. Bull. intern. Acad. Cracovie **1915B** pp. 45–79 pl. iii.

II.—SUBJECT INDEX.

General Economics and Technique.

Indices.—Sherborn, **14.**

General Anatomy.

Spicules.—Dendy, **5** & **6**; Schrammen, **13**; Topsent, **17.**

Physiology.

Metabolism.—Holtz, **10.**

Environmental effects.—Orton, **11.**

Reproduction, Life-cycle.

Growth.—Dendy, **6.**

Asexual Reproduction.—Wierzejski, **18.**

Development.—Wierzejski, **18.**

Larval Forms.—Topsent, **17.**

Ethology.

[Vacant.]

Variation, Phylogeny.

Evolution.—Dendy, **6.**

Phylogeny, Classification.—Schrammen, **13.**

Distribution (Geography).

Geographical.—*Europe*: Resvoy, **12.** *America*: Smith, **15.** *Australasia*: Brøndsted, **2**; Dendy & Frederick, **7.** *Atlantic*: Dollfus, **8.** *Pacific*: Brøndsted, **1**; Dendy, **5.**

Geological.—*Secondary*: Fritsche, **9**; Schrammen, **13.** *Primary*: Clarke, **4**; Tansey, **16.**

III.—SYSTEMATIC.

General.

Sponges, non-Antarctic, practically all from off New Zealand coast: Dendy Brit. Antarctic ("Terra Nova") Exped. Zool. vol. **6** no. 3 pp. 269–392 15 pls.

Calcarea.

Ascoleucetta **gen. n.** (*Leucascidae*) *compressa* **sp. n.**, Abrolhos Isl., Dendy & Frederick J. Linn. Soc. Zool. **35** p. 481 pl. xxv fig. 3 pl. xxvi figs. 2–5.

Grantia ramulosa **sp. n.** p. 281 pl. ii, Dendy "Terra Nova" Exped. Zool. **6.**

Grantiopsis cylindrica Dendy **var. n.** *fruticosa*, Dendy & Frederick J. Linn. Soc. Zool. **35** p. 486 pl. xxv fig. 9.

Lelapia antiqua **sp. n.**, Dendy & Frederick T.c. p. 487 pl. xxv fig. 10 pl. xxvi fig. 8.

Leucettusa tubulosa p. 276 pl. i figs. 1–10, *lancifer* p. 278 figs. 11–18 **spp. n.** N. Zealand, DENDY "Terra Nova" Exped. Zool. **6.**

Leucosolenia grisea **sp. n.**, DENDY & FREDERICK J. Linn. Soc. Zool. **35** p. 480 pl. xxv fig. 1, pl. xxvi fig. 1.

Vosmaeropsis mackinnoni **sp. n.**, DENDY & FREDERICK J. Linn. Soc. Zool. **35** p. 483 pl. xxv fig. 4, pl. xxvi fig. 6.

NON-CALCAREA.

(a) Myxospongida.

[Vacant.]

(b) Hexactinellida.

†*Cameroptychium serotinum* **sp. n.** Cretaceous, Germany, SCHRAMMEN Monogr. geol. Paleontol. Ser. 1 H. **2** p. 28 text-fig. 1.

†*Ceratodicyta* sp., the "Burton" sponge, Devonian, enormous size, CLARKE New York State Mus. Bull. No. **251** pp. 121 & 122 3 pls.

†*Farreopsis* **gen. n.** *diffusa* **sp. n.**, Cretaceous, N.W. Germany, SCHRAMMEN Monogr. Geol. Paleont. Ser. 1 H. **2** p. 29 pl. xiii fig. 3.

†*Lepidospongia fragilis* Schrm. **var. n.** *tenuistriata*, SCHRAMMEN T.c. p. 26.

†*Loboptychium* **gen. n.** *concavum* **sp. n.**, p. 27 pl. xvii fig. 8, SCHRAMMEN T.c.

†*Orthodiscus* **gen. n.** *fragilis* **sp. n.**, Cretaceous, Germany, SCHRAMMEN T.c. p. 26 pl. xiii fig. 4, pl. xvi figs. 1, 2.

†*Pachypegma* **gen. n.**, *macrostoma* **sp. n.**, Cretaceous, N.W. Germany, p. 31 pl. xiii figs. 5, 6, SCHRAMMEN T.c.

†*Pycnogaster* **gen. n.**, *texturatus* **sp. n.**, SCHRAMMEN T.c. p. 30 pl. xiii figs. 1, 2.

†*Rhaphidonema maeandraceum* **sp. n.**, Cretaceous Chile, FRITSCHE Neues Jahrb. Min. Beil. Bd. **50** p. 314 pl. iv fig. 4.

Rossella ijimai **sp. n.** p. 284 pl. iii fig. 5, pl. iv. figs. 1–16, DENDY "Terra Nova" Exped. Zool. **6.**

Symplectella **gen. n.** (*Rossellidae*) p. 286 *rowi* **sp. n.** p. 287 pl. iii figs. 1–3, pl. iv, figs. 17–39 N. Zealand, DENDY T.c.

†*Ventriculites successor* **sp. n.**, Cretaceous, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2** p. 25 pl. xiv fig. 1.

(c) Tetraxonida.

Sponges from the Auckland and Campbell Islands, BRØNDSTED Videns. Medd. **75** pp. 117–167 36 text-figs.

Sponges from New Zealand, Part I, BRØNDSTED op. cit. **77** pp. 435–483 34 text-figs.

Sponges from the Abrolhos Isl., W. Australia, with new and interesting forms, DENDY & FREDERICK J. Linn. Soc. Zool. **35** pp. 477–519 pl.s xxv & xxvi.

†*Tetraxonida*, Cretaceous, N.W. Germany, with many new forms, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2** pp. 34–132 many pls.

†*Acanthastrella* **gen. n.** (*Acanthastrellidae* **fam. n.**) *penniculosa* **sp. n.** p. 44 pl. vi fig. 2, pl. vii fig. 1, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2.**

Aciculites pulchra **sp. n.** N. Zealand, DENDY "Terra Nova" Exped. Zool. **6** p. 315 pl. vi fig. 1.

Amphiastrella kirkpatricki **sp. n.** N. Zealand, DENDY T.c. p. 371 pl. ix fig. 2, pl. xv figs. 28–31.

†*Amphichondrium* **gen. n.** p. 127 type *Verruculina convoluta* (Quenst.), SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2.**

†*Amphilectella erecta* **sp. n.** p. 64, pl. vi fig. 8, pl. xv fig. 11, SCHRAMMEN T.c.

†*Amphistomium* **subgen. n.** (of *Leiodorella*) *aequabile* p. 115 pl. ii fig. 13, pl. xv fig. 10, *spinatum* p. 116, **spp. n.**, SCHRAMMEN T.c.

Anchinoë affinis **sp. n.**, p. 467 fig. 22, N. Zealand, BRØNDSTED Videns. Medd, **77.**—*A. fictitioides* **sp. n.**, Abrolhos Isl., DENDY & FREDERICK J. Linn. Soc. Zool. **35** p. 504 pl. xxv fig. 13, pl.xxvi, fig. 13.—*A. fristedti* p. 359 pl. xv figs. 5–8, *novae-zealandiae* p. 360 pl. xii fig. 2, pl. xv figs. 9–11, DENDY "Terra Nova" Exped. Zool. **6.**

Ancorina brevidens **sp.n.**, Abrolhos Isl., DENDY & FREDERICK J. Linn. Soc. Zool. **35** p. 493 pl. xxvi fig. 9.—*A. stalagmoides* p. 297 pl. iii fig. 4, pl. vii figs. 12–15, *alata* p. 298 pl. v figs. 1, 2, pl. viii figs. 1–7, *osculifera* p. 300 *novae-zealandiae* p. 301 pl. viii figs. 8–15, **spp. n.**; *A. progressa* Lend. **var. n.** *diplococcus* p. 297, DENDY "Tera Nova" Exped. Zool. **6**.

Artemisina jovis p. 343 pl. xii fig. 6, *elegantula* p. 344 **spp. n.** N. Zealand, DENDY T.c.

†*Astrocladia nitida* **sp. n.** p. 56, pl. vi fig. 5, pl. xii fig. 5, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2**.

†*Astrolemma* **gen. n.** p. 59, *semiglobosa* **sp. n.** p. 60 pl. xvii fig. 7, SCHRAMMEN T.c.

†*Atractophora armata* **sp. n.** p. 76, pl. ix fig. 11, pl. xii fig. 2, SCHRAMMEN T.c.

†*Aulosoma* **gen. n.** type *Spongia radiciformis* Phill. p. 106 pl. ii fig. 10, *bulbosa* **sp. n.** p. 108 pl. xv fig. 6, SCHRAMMEN T.c.

Axinella colvillii p. 474 fig. 27, *globula* p. 475 fig. 28, **spp. n.** N. Zealand, BRØNDSTED Videns. Medd. **77**.—*A. torquata* p. 147 text-fig. 25, *verrucosa* p. 148 fig. 26 **spp. n.**, BRØNDSTED *op. cit.* **75**.—†*A. cretacea* **sp. n.** p. 75, pl. xiii fig. 8, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2**.

Biemna rhaphidiophora **sp. n.** p. 136 text-fig. 17, BRØNDSTED Videns. Medd. **75**.—*B. novae-zealandiae* **sp. n.**, DENDY "Terra Nova" Exped. Zool. **6** p. 346 pl. xiv figs. 1–4.

Bubaris oxeata p. 349 pl. xiv figs. 20, 21, *elegans* p. 350 pl. x fig. 5, pl. xiv figs. 22–24, *ornata* p. 351 figs. 25–27, **spp. n.** N. Zealand, DENDY T.c.

Chalina oculata Bowerb. **var. n.** *novae-zealandiae*, DENDY T.c. p. 326.

†*Chenendopora fungiformis* Lamx. **var. n.** *angustata* p. 57 pl. xvi fig. 10, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2**.

Chondrilla, species included in, diagnoses, BURTON Ann. Mag. Nat. Hist. ser. 9 **14** pp. 206–209.

†*Chondriophyllum* **gen. n.** *tenue* Roem. p. 126 pl. iii fig. 13, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2**.

Cinachyra uteoides **sp. n.** p. 318 pl. x fig. 4, DENDY "Terra Nova" Exped. Zool. **6**.—*C. novae-zealandiae* **sp. n.**, BRØNDSTED Videns. Medd. **77** p. 445 fig. 5.

†*Cladodermia* **gen. n.** type *C.* (*D.*) *colossea* Schr. p. 51 pl. v figs. 11, 12, pl. xiv fig. 2, *gigas* **sp. n.** p. 52 pl. xiv fig. 4, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2**.—†*C. morchella* **sp. n.** p. 143, pl. xv figs. 1, 2, SCHRAMMEN T.c.

Clathria mortensenii **sp. n.** Campbell Isl., BRØNDSTED Videns. Medd. **75** p. 143 text-fig. 22.—*C. scotti* p. 352 pl. x fig. 1, pl. xiv figs. 5–8, *terraenovae* p. 353 pl. xii fig. 5, pl. xiv figs. 9–13, DENDY "Terra Nova" Exped. Zool. **6**.

†*Coelophyllum* **gen. n.** *marginatum* **sp. n.** p. 150, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2**.

Cornulum novae-zealandiae **sp. n.**, BRØNDSTED Videns. Medd. **77** p. 473 fig. 26.

Crellomyxilla **gen. n.** (*Desmacidonidae*) p. 363, *intermedia* **sp. n.** p. 364 pl. xv figs. 16–21, DENDY "Terra Nova" Exped. Zool. **6**.

†*Cryptodesma* **gen. n.** for *Asterospongia globosa* Roem. p. 132, pl. vii fig. 6, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2**.

†*Cryptothelion* **gen. n.** *geminum* **sp. n.** p. 122 pl. iii fig. 5 with **varr. n.** *poculum*, *auriformis* p. 123, SCHRAMMEN T.c.

†*Cytoracea costata* Schr. **var. n.** *alata* p. 105, pl. ii fig. 4, pl. xvii fig. 2, *nidulifera* Roem. **var. n.** *gleba* p. 141 pl. xiv fig. 5, SCHRAMMEN T.c.

†*Dactylotus auricularis* **sp. n.** p. 58 pl. v fig. 10. pl. xii fig. 6, SCHRAMMEN T.c.

Desmacidon novae-zealandiae **sp. n.** BRØNDSTED Videns. Medd. **77** p. 460 fig. 17.

Discorhabdella **gen. n.** (*Clavulidae*) *incrustans* **sp. n.** p. 376 pl. xv figs. 34–38, N. Zealand, DENDY "Terra Nova" Exped. Zool. **6**.

Dotonella **gen. n.** (*Clavulidae*) *mirabilis* **sp. n.** p. 379 pl. xv figs. 43–45, DENDY T.c.

Esperiopsis crassofibrosa p. 139 text-fig. 19, *glaber* p. 141 fig. 20 **spp. n.**, BRØNDSTED Videns. Medd. **75.**—*E. megachela* **sp. n.** p. 341 pl. xiii figs. 21–25, *E. macrosigma* Steph. **var. n.** *novae-zealandiae* p. 341 pl. xiii figs. 14–20, DENDY "Terra Nova" Exped. Zool. **6.**

†*Gelasinophorus* **gen. n.** *reitemeyeri* **sp. n.** p. 66, pl. vi fig. 14, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2.**

Gelliodes flagelliformis p. 129 text-figs. 10, 11, *filiformis* p. 131 figs. 12, 13, **spp. n.** Auckland & Cambbell Isls., BRØNDSTED Videns. Medd. **75.**—*G. strongylofera* p. 448 fig. 7, *biformis* p. 449 fig. 8, **spp. n.** N. Zealand, BRØNDSTED *op. cit.* **77.**

Gellius intermedia, text-fig. 9, *irregularis* fig. 8, p. 127 **spp. n.**, BRØNDSTED *op. cit.* **75.**—*G. petrocalyx* p. 321 pl. vi figs. 2, 3, *imperialis* p. 322 pl. ix fig. 1, *tubuloramosus* p. 323, **spp. n.** N. Zealand, DENDY "Terra Nova" Exped. Zool. **6** p. 323.—*G. regius* **sp. n.** N. Zealand, BRØNDSTED Videns. Medd. **77** p. 447 fig. 6.

Geodia regina p. 308 pl. v fig. 5 pl. viii figs. 16–22, *rex* p. 311 pl. vi fig. 4, pl. viii figs. 23–28, **spp. n.** N. Zealand, DENDY "Terra Nova" Exped. Zool. **6.**

Geodinella vestigifera **sp. n.** p. 313 pl. viii figs. 29–37, DENDY T.c.

†*Gigantodesma* **gen. n.** for *Pachypoterion auritum* Schr. p. 62, pl. v fig. 5, pl. vi fig. 12, pl. xii fig. 1, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2.**

Guitarra antarctica (Hentsch.) **var. n.** *novae-zealandiae* p. 336, DENDY "Terra Nova" Exped. Zool. **6.**—*G. bipocillifera* **sp. n.** N. Zealand, BRØNDSTED Videns. Medd. **77** p. 458 fig. 16.

Halichondria incrustans p. 117 text-fig. 1, *intermedia* p. 119 fig. 2, **spp. n.**, Auckland & Campbell Isl., BRØNDSTED Vid. Medd. **75.**—*H. magellanica* **sp. n.**, DENDY "Terra Nova" Exped. Zool. **6** p. 325.—*H. phakellioides* **sp. n.** Abrolhos Isl., DENDY & FREDERICK J. Linn. Soc. Zool. **35** p. 498 pl. xxvi fig. 10.—*H. reticulata* **sp. n.** p. 450 fig. 9, BRØNDSTED Videns. Medd. **77.**

†*Heterostinia lobata* **sp. n.** p. 62 pl. vi fig. 11, pl. xii fig. 7, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2.**

†*Heterothelion* **gen. n.** type *Verruculina cupula* Schrm. p. 118, *heimburgense* **sp. n.** p. 119 pl. iii fig. 3, pl. xvi fig. 9, *angulatum* Schrm. **var. n.** *lobata* p. 119 pl. xiv fig. 6, SCHRAMMEN T.c.—†*H. cupula* Schrm. **var. n.** *impressa* p. 141, SCHRAMMEN T.c.

†*Hindia fibrosa* (Roemer), Bailey limestone (Devonian), TANSEY Miss. Bur. Geol. **1922** p. 176 pl. xl figs. 1–4.

Histodermella australis **sp. n.** p. 373 pl. xv figs. 24–27, DENDY "Terra Nova" Exped. Zool. **6.**

†*Homalodora tuberosa* Schr. **var. n.** *capitata* p. 63 pl. vi fig. 10, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2.**

Hymedesmia lundbecki **sp. n.** p. 358 pl. xiv figs. 28–30, DENDY "Terra Nova" Exped. Zool. **6.**

Hymeniacidon indistincta **sp. n.** p. 146 text-fig. 24, BRØNDSTED Videns. Medd. **75.**—*H. racemosa* p. 476 fig. 29, *haurakii* p. 477 fig. 30, *novae-zealandiae* p. 477 fig. 31, *erecta* p. 479 fig. 32, **spp. n.**, BRØNDSTED *op. cit.* **77.**

Inflatella spherica **sp. n.**, DENDY "Terra Nova" Exped. Zool. **6** p. 373 pl. ix fig. 3.

Iophon laevistylus **sp. n.** N. Zealand, DENDY T.c. p. 347 pl. x fig. 1.

Iophonopsis **gen. n.** (*Desmacidonidae*) for *Halichondria nigricans* Bowerb. as type sp. and other forms, DENDY T.c. p. 348.—*I. major* p. 461 fig. 18 with **var. n.** *tenuis* p. 462, *minor* **sp. n.** p. 462, BRØNDSTED Videns. Medd. **77.**

Isodictya cavicornuta **sp. n.** p. 335 pl. x figs. 2, 3, DENDY "Terra Nova" Exped. Zool. **6.**

Jaspis novae-zealandiae **sp. n.**, DENDY T.c. p. 305 pl. vii figs. 20–23.

Latrunculia spinispiraefera **sp. n.** N. Zealand, BRØNDSTED Videns. Medd. **77** p. 480 fig. 33.

†*Leiohyphe* **gen. n.** *solitaria* **sp. n.** p. 67, pl. vi fig. 15, pl. xvii fig. 4, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2.**

†*Leiophyllum* **gen. n.** *panniculosum* **sp. n.**, SCHRAMMEN T.c. p. 52 pl. xv fig. 8.

Lepidospongia **gen. n.** (*Lithistidae*) *incrustans* **sp. n.** p. 317 pl. xiii figs. 1–3, DENDY "Terra Nova" Exped. Zool. **6.**

Lissoplocamia **gen. n.** (*Plocamidae*) *prima* **sp. n.** p. 470 fig. 24, New Zealand, BRØNDSTED Videns. Medd. **77.**

†*Lophiophora* **gen. n.** *sulcata* p. 101 pl. ii figs. 11, 12, pl. v fig. 7, pl. xvi fig. 4, *incrustans* p. 102 pl. xvii fig. 1, **spp. n.**, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2.**

†*Mastophorus* **gen. n.** *arboreus* **sp. n.** Cretaceous, Germany, SCHRAMMEN T.c. p. 54 pl. xiv fig. 3.

Megalopastas arenifibrosa **sp. n.**, DENDY & FREDERICK J. Linn. Soc. Zool. **35** p. 510 pl. xxv fig. 15.

Microcionia novae-zealandiae p. 463 fig. 19, *heterospiculata* p. 465 fig. 20, *pyramidalis* p. 466 fig. 21 **spp. n.**, BRØNDSTED Videns. Medd. **77.**

†*Microdendron confluens* **sp. n.** p. 56 pl. vi fig. 6, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2.**

Microtylostylifer **gen. n.** (*Clavulidae*) p. 381, *anomalus* **sp. n.** p. 382 pl. xv figs. 46–49, DENDY "Terra Nova" Exped. Zool. **6.**

Monosyringa **gen. n.** (*Stellettidae*) p. 441, *mortenseni* **sp. n.** p. 442 fig. 4, N. Zealand, BRØNDSTED Videns. Medd. **77.**

Mycale lilliei p. 337, *novae-zealandiae* p. 339 pl. v fig. 3, pl. xiii figs. 6–13 **spp. n.**, DENDY "Terra Nova" Exped. Zool. **6.**

Myriastra biformis **sp. n.** N. Zealand, BRØNDSTED Videns. Medd. **77** p. 435 fig. 1.

Myxilla crelloides **sp. n.** N. Zealand, BRØNDSTED T.c. p. 468 fig. 23.—*M. novae-zealandiae* **sp .n.**, DENDY "Terra Nova" Exped. Zool. **6** p. 361 pl. x fig. 6, pl. xv figs. 12–15.—*M. tornotata* **sp. n.**, Auckland Isl., BRØNDSTED Vid. Medd. **75** p. 142 text-fig. 21.

Oceanapia (?) *arcifera* **sp. n.** N. Zealand, DENDY "Terra Nova" Exped. Zoool. **6** p. 332 pl. xiii figs. 4 5.

†*Oncophora* **gen. n.** *maendrina* **sp. n.** p. 112 pl. ii fig. 1, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2.**

†*Ortmannia* **gen. n.** *colligens* **sp. n.** p. 74 pl. xvi fig. 7, SCHRAMMEN T.c.

†*Pachinion familiare* Roem. **var. n.** *confluens* p. 65, SCHRAMMEN T.c.

Pachychalina conica p. 454 fig. 12, *affinis* p. 455 fig. 13, *lunae* p. 455 fig. 14, **spp. n.** New Zealand, BRØNDSTED Videns Medd. **77.**—*P. densa* **sp. n.**, BRØNDSTED *op. cit.* **75** p. 125 text-fig. 7.

†*Pachysalax sinuosa* **sp. n.** p. 103 pl. ii fig. 12, pl. xvi fig. 8, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2.**

†*Pachyselis* **gen. n.** p. 93 for *Chonella auriformis* Schr. p. 94 pl. i fig. 8, SCHRAMMEN T.c.

Parahigginsia **gen. n.** (*Desmacidonidae*) p. 374 *phakellioides* **sp. n.** p. 375 pl. xi fig. 4, pl. xv figs. 32, 33, N. Zealand, DENDY "Terra Nova" Exped. Zool. **6.**

†*Paraspelaeum* **gen. n.** *obductum* **sp. n.** p. 60 pl. xv fig. 5, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2.**

Penares tylotaster **sp. n.** N. Zealand, DENDY "Terra Nova" Exped. Zool. **6** p. 303 pl. vii figs. 16–19.

Petrosia coralloides **sp. n.** N. Zealand, DENDY T.c. p. 324 pl. xi fig. 1.

Phloeodictyon aberrans **sp. n.**, DENDY T.c. p. 333.—*P. abrolhosensis* **sp. n.**, DENDY & FREDERICK J. Linn. Soc. Zool. **35** p. 501 pl. xxvi fig. 11.

†*Phyllodermia* **gen. n.** p. 48, *spinosa* pl. v fig. 14, pl. xvii fig. 3, *secata* pl. xvi fig. 5, p. 50 **spp. n.**, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2.**

†*Phymatella bullata* **sp. n.** p. 59, SCHRAMMEN T.c.

†*Plinthosella gleba* **sp. n.** p. 57, pl. v, fig. 1, pl. xiii fig. 7, SCHRAMMEN T.c.

Polymastia granulosa **sp.n.** p. 162 text-fig. 36, BRØNDSTED Videns. Medd. **75.**

†*Polyproctus* **gen. n.** *tuberosus* **sp. n.**, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2** p. 151.

†*Polyrhipidium* **gen. n.** p. 54, *cristagalli* **sp. n.** p. 55 pl. xvi fig. 6, SCHRAMMEN T.c.

†*Procaliapsis subglobosa* p. 143, *gemina* p. 144, **spp. n.**, SCHRAMMEN T.c.

Pseudoesperia carteri p. 501 pl. xxvi fig. 12, *trichophora* p. 502 **spp. n.**, DENDY & FREDERICK J. Linn. Soc. Zool. **6.**

†*Pseudoscytalia* **gen. n.** p. 109 type *Spongia terebrata* Phill. p. 110 pl. iii fig. 11, SCHRAMMEN Monogr. Geol, Paleont. ser. 1 H. **2.**

Pyloderma demonstrans **sp. n.** p. 370 pl. ix fig. 4 pl. xv figs. 22, 23, DENDY "Terra Nova" Exped. Zool. **6.**

Raspailia topsenti p. 354 pl. xii fig. 4, pl. xiv figs. 14–16, *inaequalis* p. 355 pl. xii fig. 1, pl. xiv figs. 17–19, **spp. n.**, DENDY T.c.

Reniera pulcherrima **sp. n.** N. Zealand, BRØNDSTED Videns. Medd. **77** p. 451 fig. 10.

Rhabderemia coralloides **sp. n.** N. Zealand, DENDY "Terra Nova" Exped. Zool. **6** p. 357 pl. xii fig. 3, pl. xv figs. 1–4.

†*Rhabdotum* **gen. n.** *columna* **sp. n.** p. 95, pl. i fig. 10, pl. xvi fig. 3, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2.**

†*Rhagadina rimosa* Roem. **var. n.** *elongata* p. 53 pl. v fig. 13, SCHRAMMEN T.c.

†*Seliscothon verrucosum* **sp. n.** p. 92, pl. i fig. 45, pl. xv fig. 7, *S. planum* Phill. **var. n.** *pustulosa* p. 92, SCHRAMMEN T.c.

Sigmaxinella stylotata p. 150 text-fig. 27, *pulchra* p. 151 fig. 28, *florida* p. 154 fig. 29, *papillata* p. 156 fig. 30, **spp. n.**, BRØNDSTED Videns. Medd. **75.**

†*Siphonia incrassata* Griep. **var. n.** *coronata* p. 138, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2.**

Siphonochalina latituba p. 329 pl. x figs. 7, 8, **sp. n.** *S. minor* Dendy **var. n.** *regalis* p. 328, DENDY "Terra Nova" Exped. Zool. **6.**

Spongilla rotundacuta **sp. n.** Volga, RESVOY Arb. biol. Wolga-Station **7** pp. 69, 71.

Spongosorites novae-zealandiae **sp. n.**, DENDY "Terra Nova" Exped. Zool. **6** p. 307.

†*Sporadothelion* **gen. n.** *dissipatum* **nom. nov.** for *Verruculina miliaris* Hinde p. 120, pl. iii fig. 4, & **var. n.** *angustata* p. 121 pl. xv fig. 4, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2.**

†*Stelidium* **gen. n.** *vermiculare* **sp. n.** p. 55, pl. √ fig. 9, pl. vi fig. 4, pl. xii fig. 4, SCHRAMMEN T.c.

Stelletta maori p. 290 pl. vii figs. 8–11, with **var. n.** *bistellata* p. 291, *cratre* p. 292 pl. ix fig. 5, pl. vii figs. 5–7, *columna* p. 294 pl. v fig. 4, pl. vii figs. 1–4 **spp. n.** New Zealand, DENDY "Terra Nova" Exped. Zool. **6.**—*S. novae-zealandiae* p. 436 fig. 2, *sandalinum* p. 438 fig. 3, **spp. n.**, BRØNDSTED Videns. Medd. **77.**

Suberites affinis p. 159 text-fig. 32, *ramosus* p. 160 fig. 33 *anastomosus* p. 161 fig. 34, *incrustans* p. 162 fig. 35, **spp. n.**, Auckland & Campbell Isl., BRØNDSTED *op. cit.* **75.**—*S. axinelloides* **sp. n.** N. Zealand, BRØNDSTED *op. cit.* **77** p. 481 fig. 34.—*S. carnosus* (Johnston) **var. n.** *novae-zealandiae*, DENDY "Terra Nova" Exped. Zool. **6.**

Tedania crista-galli **sp. n.** N. Zealand, DENDY T.c. p. 365 pl. xii fig. 8.—*T. diversirhaphidiophora* p. 133 text-fig. 15, *placentaeformis* p. 135 fig. 16, **spp. n.**, BRØNDSTED Videns. Medd. **75.**

Tedanione connectens **sp. n.** N. Zealand p. 471 fig. 25, BRØNDSTED T.c..

Tedaniopsis **gen. n.** (*Desmacidonidae*) p. 366, *turbinata* **sp. n.** p. 367 pl. xi figs. 2, 3, pl. xiv figs. 31–35, N. Zealand, DENDY "Terra Nova" Exped. Zool. **6.**

Tetrapocillon **gen. n.** (*Esperellinae*) p. 456, *novae-zealandiae* **sp. n.** p. 457 fig. 15, BRØNDSTED Videns. Medd. **77.**

†*Thecosiphonia excavata* **sp. n.** p. 142 pl. xvii fig. 6, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2.**

Thrinacophora dubia **sp. n.** p. 157, text-fig. 31, BRØNDSTED Videns. Medd. **75.**

Toxochalina difficilis **sp. n.** p. 132 text-fig. 14, BRØNDSTED T.c.

Trachycladus stylifer **sp. n.** p. 377 pl. xii fig. 7, pl. xv figs. 39–42, DENDY "Terra Nova" Exped. Zool. **6.**

†*Trachynotus* **gen. n.** p. 112 for *Coscinostoma auricula* Schrm. p. 113 pl. ii figs. 2 & 3, pl. xvii fig. 5, SCHRAMMEN Monogr. Geol. Paleont. ser. 1 H. **2.**

†*Verruculina aurita* Roem. **var. n.** *rudis* p. 125, SCHRAMMEN T.c.

(d) Euceratosa.

Spongelia dakini **sp. n.**, DENDY & FREDERICK J. Linn. Soc. Zool. **35** p. 511 pl. xxv fig. 11.—*S. spiculivora* **sp. n.** N. Zealand, DENDY "Terra Nova" Exped. Zool. **6** p. 384,

IV. COELENTERATA

ARRANGED BY

A. KNYVETT TOTTON

CONTENTS.

	PAGE
I. Titles	1
II. Subject Index	7
III. Systematic Index	9

I.—TITLES.

1.—Ackermann, D., **Holtz,** F. and **Reinwein,** H. Reindarstellung und Konstitutionsermittelung des Tetramins eines Giftes aus *Aktinia equina*. Zs. Biol. München **79** 1923 pp. 113–120.

2.—Ackermann, D., **Holtz,** F. and **Reinwein,** H. Über die Extraktstoffe von *Aktinia equina*. Zs. Biol. München **80** 1924 pp. 131–136.

3.—Ackerman, D., **Holtz,** F. and **Reinwein,** H. Über das Aktinin. Zs. Biol. München **81** 1924 pp. 61–64.

4.—Backhoff, —. Ein neuer Fundort von *Microhydra ryderi* Potts. Zool. Anz. Leipzig **58** 1924 p. 194.

5.—Bale, W. M. Reports on some hydroids from the New Zealand coast, with notes on New Zealand Hydroida generally, supplementing Farquhar's list. Trans. Proc. N. Zeal. Inst. Wellington **55** 1924 pp. 225–268 18 t. ff.

6.—Balss, H. Über Anpassungen und Symbiose der Paguriden. Eine zusammenfassende Übersicht. Zeits. Morph. Ökol. Tiere Berlin **1** 1924 p. 752–792 t. ff.

7.—[Barnard, K. H.] (Exhibition of a pelagic Sea-anemone.) Trans. R. Soc. S. Africa Cape Town **12** 1924 p. x.

8.—Beer, G. R. de and **Huxley,** J. S. Studies in dedifferentiation. 5. Dedifferentiation and Reduction in *Aurelia*. Q. J. Microsc. Sci. London **68** 1924 pp. 471–479 1 pl. 10 t. ff.

9.—Bekker, H. Stratigraphical and Palaeontological supplements on the Kukrose stage of the Ordovician rocks of Eesti (Estonia). Publ. Geol. Inst. Tartu **1** No. 1 1924 pp. 19 2 pls. t. ff. [English translation.]

10.—Benson, W. N. and **Smith,** S. On some Rugose corals from the Burindi Series (Lower Carboniferous) of New South Wales. Q. J. Geol. Soc. London **79** 1923 pp. 156–171 2 pls.

11.—Billard, A. Note critique sur divers genres et espèces d'Hydroïdes avec la description de trois espèces nouvelles. Rev. Suisse Zool. Genève **31** 1924 pp. 53–74 t.ff.

12.—Billard, A. Note sur une espèce nouvelle de Plumularide des Côtes du Maroc (*Cladocarpus Dollfusi*). Bull. Soc. Zool. Paris **49** 1924 pp. 87–89 t.f.

13.—Boschma, H. On two different growth-forms of *Merulina laxa*, Dana. Zool.-Meded. Leiden **8** 1924 pp. 36–38 1 pl.

14.—Boschma, H. Regeneration und Knospung bei koloniebildenden Fungiden. Tijdschr. Ned. Dierk. Ver. (2) **19** 1924 pp. 56–60.

15.—Boschma, H. On the food of *Madrepororia.* Versl. Wis. Nat. Afd. K. Akad. Wet. Amsterdam **27** 1924 pp. 13–23 (Transl. Proc.).

16.—Branson, E. B. The Devonian of Missouri. Missouri Bureau Geol. (2) **17** 1923 pp. x + 279 + xv 71 pls.

17.—Brière, Y. Paleontologie de Madagascar XI.—Fossiles problématiques du Permien. Ann. Pal. Paris **12** 1923 pp. 125–132.

18.—Carlgren, O. *Ceriantharia und Zoantharia. In*: Chun, C. Wiss. Ergeb. Deutsch. Tiefsee-Exped. Valdivia **19** Heft 7 1923 pp. 243–338 pls. xxiv–xxxiii t.ff.

19.—Carlgren, O. Die Larven der Cerianthien, Zoantharien und Actiniarien. *In*: Wiss. Ergeb. Deutsch. Tiefsee-Exped. Valdivia **19** Heft 8 1924 pp. 341–476 pls. xxxiii–xxxviii t.ff.

20.—Carlgren, O. Description de deux *Actiniaria* [Appendice, Dollfus, R. P. Contribution à la faune des invertébres du banc de Rockall.] Bul. Inst. Océan. Moncao No. **438** 1924 pp. 26–28.

21.—Carlgren, O. Papers from Dr. Th. Mortensen's Pacific Expedition 1914–16. XVI. *Ceriantharia.* Videns. Medd. Nat. For. Kjöbenhavn **75** 1924 pp. 169–195 t.ff.

22.—Cecchini, C. Gli Alcionari e i Madreporari raccolti nel Mediterraneo dalla R. N. "Washington" (1881–1883). Arch. Zool. Napoli **9** 1917 pp. 123–157 t.ff. 1 pl.

23.—Child, C. M. Experimental regression and redevelopment in *Corymorpha palma.* Anat. Rec. Philadelphia **29** 1924 p. 98.

24.—Clark, A. E. On *Heptaphyllum,* a new genus of Carboniferous coral. Geol. Mag. London **61** 1924 pp. 416–423 t.ff.

25.—Clark, B. L. and **Arnold,** R. Fauna of the Sooke Formation, Vancouver Island [with description of a new coral.] Univ. Cal. Pub. Geol. Berkeley **41** 1924 pp. 175–176 pl. xl.

26.—Cottreau, J. Paleontologie de Madagascar X.—Fossiles Crétacés de la Cote Orientale. Ann. Paléont. Paris **11** 1922 pp. 109–192 11 pls.

27.—Coy, E. C. [Plankton Investigations] Coelentera (1922). Rep. Dove Mar. Lab. Cullercoats N.S. **13** 1924 pp. 50–56.

28.—Dahlgrün, F. Über Graptolithen führende Schichten im Unterharz. Jahrb. Geol. Landesanst. Berlin **43** 1923 pp. 169–181.

29.—Delap, M. J. Further notes on the plankton of Valentia Harbour. 1906–1923. Irish Nat. Dublin **33** 1924 pp. 1–6.

30.—Demanet, F. Le Waulsortien de Sosoye . . . II.—Partie Paléontologique. Mem. Inst. Geol. Univ. Louvain **2** 1923 pp. 111–284 12 pls.

31.—Derjugin, K. Das Barents-Meer längs dem Kola-Meridian (33° 30′ östl. L.). Intern. Rev. Hydrobiol. Leipzig **12** 1924 pp. 145–174.

32.—Dollfus, R. P. Contribution à la faune des invertébrés du banc de Rockall. Bul. Inst. Océan. Monaco No. **438** 1924 pp. 28.

33.—Elles, G. L. Evolutional palaeontology in relation to the lower palaeozoic rocks. Rep. Brit. Ass. London for **1923** 1924 pp. 83–107.

34.—Evans, W. E. On the identity of the sea-anemone *Actinia elegans,* Dalyell. Scottish Nat. Edinburgh for **1924** 1924 pp. 121–125.

35.—Evans, W. E. The occurrence in the Forth of the sea-anemone *Sagartia pallida* (Holdsw.); with remarks on its anatomy, reproduction, and affinities. Scottish Nat. Edinburgh for **1924** 1924 pp. 185–188.

36.—Ferronnière, G. Le Calcaire de la Grange près Chalonnes (Maine-et-Loire). Bul. soc. sci. nat. Nantes (4) **2** 1922 pp. 1–37 2 pls.

37.—Föyn, B. Künstlich hergestellter Hermaphroditismus bei Hydroiden. Zool. Anz. Leipzig **61** 1924 pp. 105–110 t.ff.

38.—Frisch, K. v. Über die Verdauung bei *Hydra.* Verh. Zool. Bot. Ges. Wien **73** for **1923** 1924 pp. 37–43.

39.—Garman, H. The fresh-water jellyfish (*Craspedacusta sowerbyi*) in Kentucky again. Science New York **60** 1924 pp. 477–478.

40.—Garwood, E. J. and **Goodyear, E.** The Lower Carboniferous succession in the Settle district and along the line of the Craven faults. Q. J. Geol. Soc. London **80** 1924 pp. 184–273 pls. x–xxi.

41.—Garwood, E. J. and **Goodyear, E.** *Dibunophyllum θ* Vaughan renamed *D. bourtonense.* Geol. Mag. London **61** 1924 p. 560.

42.—Gerth, H. Die Anthozoenfauna des Jungtertiärs von Borneo. [*In* : Beiträge zur Geologie Ost-Asiens und Australiens.] Samml. Geol. Reichs-Mus. Leiden **10** 1923 pp. 37–136 9 pls.

43.—Goetsch, W. Chimärenbildung bei Coelenteraten. Zool. Anz. Leipzig **59** 1924 pp. 19–30 t.ff.

44.—Goetsch, W. Die Symbiose der Süsswasser-Hydroiden und ihre Künstlicher Beeinflussung. Zeits. Morph. Ökol. Tiere Berlin **1** 1924 pp. 660–751 t.ff.

45.—Goetsch, W. Versuche über den Einfluss des Lebensraums auf die Körpergrösse von Hydren, Planarien und Kaulquappen. Verh. D. Zool. Ges. Berlin **29** 1924 pp. 60–62.

46.—Goetsch, W. Lebensraum und Körpergrösse. Biol. Zentralbl. Leipzig **44** 1924 pp. 529–560 t.ff.

Goodyear, E. *see* **Garwood, E. J.**

47.—Gortani, M. Faune paleozoiche della Sardegna. Parte I. Le Graptoliti di Goni. Palaeont. Italica **28** 1922 pp. 1–27 [41–67] 6 pls.

48.—Gortani, M. Faune palaeozoiche della Sardegna. Parte II. Graptoliti della Sardegna Orientale. Palaeont. Italica **28** 1922 pp. 85–112 5 pls.

49.—Gray, J. The Mechanism of ciliary movement.—IV. The relation of ciliary activity to oxygen consumption. Proc. R. Soc. London B. **96** 1924 pp. 95–114.

50.—Hadzi, J. Neomorphose latérale apparente sur la tige des Tubularias. Ghlas Srpske Ak. Beogh. (Belgrade) **108** 1923 pp. 84–86.

51.—Harris, W. J. Victorian Graptolites (N.S.) Part I. Proc. R. Soc. Victoria **36** 1924 pp. 92–106 2 pls.

52.—Hayasaka, I. On the fauna of the anthracolithic limestone of Ômi-Mura in the western part of Echigo. Sci. Rep. Tohoku Imp. Univ. Sendai ser. 2 Geol. **8** 1924 pp. 1–83 7 pls.

53.—Hedley, C. The Great Barrier Reef of Australia. Nat. Hist. New York **24** 1924 pp. 62–69 t.ff.

54.—Hickson, S. J. An introduction to the study of corals. [Publications of the University of Manchester, Biological series No. IV] pp. xiv + 257 110 t.ff. Manchester, 1924.

55.—Hinrichs, M. A. A demonstration of the axial gradient by means of photolysis. J. Exp. zool. Philadelphia **41** 1924 pp. 21–31 t.ff.

Holtz, F. *see* **Ackerman, D.**

Huxley, J. S. *see* **Beer, G. R. de.**

56.—Issayev, V. Researches on animal chimaeras. J. Genetics Cambridge **14** 1924 pp. 273–354 pls. 9–17 7 tables.

57.—Jarosz, J. Studien über das Krakauer Devon. 1. Teil: Das obere Famennien in der Umgebung von Debnik. Bul. Intern. Acad. Krakow **1918** B 1918 pp. 85–130 2 pls.

58.—Jespersen, P. Dr. Thorild Wulff's Plankton—collections in the waters West of Greenland. II. Thule Eksped. Grønlands No. 4 1923 [Advance Extract from Medd. Grönl. Kjöbenhavn **64** pp. 103–160].

59.—Joseph, H. Über *Haleremita, Gonionemus* und den Begriff der Trachomedusen. Ver. D. zool. Ges. Berlin **29** 1924 pp. 129–133.

60.—Kieslinger, A. Medusae fossiles: in **Diener's** Fossilium Catalogus Berlin I part **26** 1924.

61.—Kolodziejski, Z. Studies on the metabolism of the budding *Hydra.* Bul. Intern. Acad. Krakow **1923** B 1924 pp. 225–245 t.ff.

62.—Kraft, P. Über die ontogenetische Entwicklung und die Biologie von *Diplograptus* und *Monograptus.* Centralbl. Min. Stuttgart **1923** 1923 pp. 285–288.

63.—Krejci, K. Norddeutsche Miocänkorallen. Centralbl. Min. Stuttgart for **1923** 1923 pp. 602–606.

64.—Kühn, A. Coelenterata in: Bronn, H. G. Klassen und Ordnungen des Tier-Reichs., etc. **2** Abt. 2 lief. 22–36 Leipzig 1914–1916 pp. 371–538 11 pls. t.ff.

65.—Kühn, O. Zur Kenntnis des Cenomans bei Kutná Hora. Sborník Státn Geol. Úst. Českoslov. **4** 1924 pp. 31–41 t.ff.

66.—Kükenthal, W. Coelenterata Gorgonaria in: Das Tierreich. Berlin und Leipzig Lief. **47** 1924 pp. xxviii + 478 t.ff.

67.—Kwietniewski, K. Über die Längsteilung bei *Actinia cari.* Bul. Intern. Acad. Krakow **1916** B 1916 pp. 48–55 1 pl.

68.—Landauer, W. Laceration, Knospung und Heteromorphose bei *Actinea equina* L. Zeits. Morph. Ökol. Tiere Berlin **3** 1924 pp. 177–188 t.ff.

68a.—Lang, W. B. Trends in British Carboniferous corals. Proc. Geol. Ass. London **34** 1923 pp. 120–136 t.ff.

69.—[Lebour, M. V. M.B.A. Council report on work of.] J. Mar. Biol. Ass. Plymouth **13** 1924 pp. 516–517.

70.—Lewis, H. P. Upper Viséan corals of the genus *Caninia.* Q. J. Geol. Soc. London **80** 1924 pp. 389–407 pls. xxvii–xxx.

71.—Light, S. F. A new species of Scyphomedusan jellyfish in Chinese waters. China J. Sci. Arts **2** 1924 pp. 449–450 1 pl.

72.—Lionville, J. Sur les coraux nuisibles aux chalutiers du Maroc. C.R. Acad. sci. Paris **179** 1924 pp. 193–194.

Loomis, H. A. *see* **Welch,** P. S.

73.—Lund, E. J. Experimental control of organic polarity by the electric current. IV. The quantitative relations between current density, orientation, and inhibition of regeneration. J. Exp. Zool. Philadelphia **39** 1924 pp. 357–379 2 pls. t.ff.

74.—Matthai, G. On a species of sub-fossil solitary coral from the Chilka Lake. Mem. Ind. Mus. Calcutta **5** 1924 pp. 999–1003 t.f.

75.—Matthai, G. Report on the Madreporarian corals in the collection of the Indian Museum, Calcutta. Part I. Mem. Ind. Mus. Calcutta **8,** 1924 pp. 1–59 11 pls.

76.—Matthai, G. Illustrations of the Zoology of the R.I.M.S. Investigator [11 plates in: Report on the Madreporarian corals in the collection of the Indian Museum Part I.] Mem. Indian Mus. Calcutta **8** 1924 pls. i–xi.

77.—Annandale, N. Cirripedes associated with Indian corals of the families Astraeidae and Fungidae. Mem. Indian Mus. Calcutta **8** 1924 pp. 61–68 1 pl.

78.—McLearn, F. H. Palaeontology of the Silurian rocks of Arisaig, Nova Scotia. Geol. Surv. Canada Mem. **137** Geol. ser. 118 1924 pp. 180 30 pls.

79.—Metzger, A. A. T. Die Jatulischen Bildungen von Suojarvi in Ostfinland. Bull. Com. Geol. Finland No. **64** 1924 pp. 86 1 pl. t.ff.

80.—Miller, T. I. Fresh-water jellyfishes. Zool. Soc. Bul. New York **27** 1924 pp. 52–55 t.ff.

81.—Miner, R. W. Hunting corals in the Bahamas. Nat. Hist. New York **24** 1924 pp. 595–600 9 pls.

82.—Moisseiev, A. Sur la faune des graptolithes dans la région de Tuja-Mujun dans le Ferghana. C.R. Acad. sci. Russ. Leningrad **1924** 1924 pp. 10–11.

83.—Mortensen, Th. The Danish Expedition to the Kei Islands 1922. Videns Medd. nat. For Kjöbenhavn **76** 1923 pp. 55–99 3 pls.

84.—Moser, F. Die larvalen Verhältnisse der Siphonophoren in neuer Beleuchtung. Zoologica Stuttgart **28** Lief. 1 1924 pp. 52 5 pls.

85.—Neppi, V. Nuove osservazioni sui polipi idroidi del Golfo di Napoli. Pubbl. Staz. zool. Napoli **3** 1924 pp. 1–31 t.ff. 1 pl.

86.—Neppi, V. I sifonofori del golfo di Napoli. Pubbl. Staz. zool. Napoli **3** 1924 pp. 223–228.

87.—Nichols, E. L. The brightness of marine luminescence. Science N. York **60** 1924 p. 592.

88.—Palmer, D. B. K. A fauna from the middle Eocene shales near Vacaville, California. Univ. Cal. Pub. Geol. Berkeley **14** 1923 pp. 289–306 6 pls.

89.—Parker, G. H. The rate of transmission in the nerve net of the Coelenterates. J. Gen. Physiol. Baltimore **1** 1918 pp. 231–236.

90.—Parker, G. H. The excretion of carbon dioxide by relaxed and contracted Sea Anemones. J. Gen. Physiol. Baltimore **5** 1922 pp. 45–64.

91.—Pavlenko, N. N. *Gersemia askoldi* sp. n. de la mer du Japon septentrionale (Alcyonacea, Nephthyidae). Ann. Mus. zool. Acad. sci. Petrograd **21** 1916 pp. 323–342 3 pls. t.ff.

92.—Pax, F. Anthozoen des Leidener Museums. Zool. Meded. Leiden **8** 1924 pp. 1–17 t.ff.

93.—Pax, F. Actiniarien, Zoantharien und Ceriantharien von Curaçao. Bijdr. Dierk. Amsterdam **23** 1924 pp. 93–122 1 pl. t.ff.

94.—Payne, F. A study of the freshwater medusa, *Craspedacusta ryderi*. J. Morph. Philadelphia **38** 1924 pp. 387–411 10 pls.

95–96.—Peacock, A. D. [Plankton Investigations 1921–22, Marine plankton] Coelentera. Rep. Dove Mar. Lab. Cullercoats N.S. **12** 1923 pp. 92–95.

97.—Peacock, A. D. [Plankton investigations] Coelentera (1923). Rep. Dove Mar. Lab. Cullercoats N.S. **13** 1924 pp. 57–60.

98.—Perkins, E. H. A new graptolite locality in Central Maine. Amer. J. Sci. New Haven Conn. **8** 1924 pp. 223–225.

99.—Perna, A. Die Korallen der Unterkarbonablagerungen am östlichen Abhange des Süd-Urals. Mém. Com. Géol. Petrograd (n.s.) **175** 1923 pp. 34 **3** pls.

100.—Pierantoni, U. Nuove osservazioni su luminescenza e simbiosi: II. La fosforescenza dei ctenofori. Att. R. Acad. Naz. Linc. Roma (5) **33** 1925 pp. 241–244.

101.—Pratje, O. Korallenbänke in tiefen und kühlen Wasser. Centralbl. Min. Stuttgart for **1924** 1924 pp. 410–415 t.f.

102.—Prever, P. L. I coralli oligocenici di Sassello nell'Appenino Ligure. Palaeont. Ital. **28** 1922 pp. 49–88 [1–40] **7** pls.

103.—Reed, F. R. C. Some new Ordovician and Silurian Fossils. Geol. Mag. London **61** 1924 pp. 25–30 1 pl.

104.—Reich, H. Über den Fund einer *Calceola sandalina* in den "Ilseschiefern" des südlichen Westfalens. Jahrb. Geol. Landesants. Berlin **43** 1923 pp. 122–124.

Reinwein, H. *see* **Ackerman,** D.

105.—Riabinin, W. Sur la géologie de l'Oural de Solikamsk. Les constructeurs des récifs du Carbonifère de l'Oural et du Timan. Mem. Com. Géol. Petrograd (n.s.) **123** 1915 pp. 19–31 6 pls.

106.—Rioja, E. Nota sobre un hidroideo de agua salobre de Grandía (*Annulella gemmata* Ritchie). Bol. soc. Esp. Hist. Nat. Madrid **24** 1924 pp. 213–216 t.ff.

107.—Roch, F. *Microhydra germanica*, eine neue Süsswassermeduse. Zool. Anz. Leipzig **58** 1924 pp. 131–136 t.ff.

108.—Roch, F. Experimentelle Untersuchungen an *Cordylophora caspia* (Pallas) [= *lacustris* Allman] über die Abhängigkeit ihrer geographischen Verbreitung und ihrer Wuchsformen von den physikalisch-chemischen Bedingungen des umgebenden Mediums. Zeits. Morph. Ökol. Tiere. Berlin **2** 1924 pp. 350–426 667–670.

109.—Ruedemann, R. Notes on the Graptolites [*in*: **Perkins,** E. H. A new graptolite locality in central Maine.] Amer. J. Sci. New Haven Conn. **8** 1924 pp. 225–227.

110.—Rylov, V. Note préliminaire sur l'origine de la *Cordylophora lacustris* Allm. [Russian.] C.R. Acad. Sci. Russ. Petrograd **1922** A pp. 24–27.

111.—Sardeson, F. W. *Tetradium* and coral evolution. Pan-Amer. Geol. Des Moines Iowa **41** 1924 pp. 1–16 1 pl.

112.—Schmidt, W. J. Mehrfaserige ("polyine") subepitheliale Muskelzellen bei Hydromedusen (*Carmarina*). Arch. microskop. Anat. Entw. Berlin **101** 1924 pp. 455–457.

113.—Schneider, R. Verbreitung und Bedeutung des Eisens im animalischen Organismus. Arch. Natg. Berlin Abt. A **90** 1924 pt. 4 pp. 1–48.

114.—Schouteden, H. Les méduses d'eau douce du Congo. Rev. Zool. Africaine Bruxelles (Suppl. Cercle zool. Congolais) **12** 1924 p. [48].

115.—Silvestri, A. Sulla *Bradya tergestina* Stache. Riv. Ital. Palaeont. Parma **30** 1924 pp. 17–26.

Smith, G. *see* **Benson, W. N.**

116.—Stadler, H. Einiges über die Tierwelt Unterfrankens. Arch. Natg. Berlin Abt. A **90** pt. 1 1924 pp. 169–201.

117.—Stechow, E. Über den Einfluss der Temperatur auf die Erzeugung von freien Medusen, bzw. von Sporosacs bei den Hydrozoen. Verh. D. zool. Ges. Berlin **29** 1924 pp. 81–91.

118.—Stechow, E. Diagnosen neuer Hydroiden aus Australien. Zool. Anz. Leipzig **59** pp. 57–69.

119.—Stewart, G. A. The fauna of the Little Saline Limestone in Ste. Genevieve County. Missouri Bureau Geology (2) **17** 1923 pp. 213–227 9 pls.

120.—Stiasny, G. Rhizostomeen von Manila. Zool. Meded. Leiden **8** 1924 pp. 39–54 t.ff.

121.—Stiasny, G. Ueber einige Scyphomedusen von Sydney (Port Jackson). Zool. Meded. Leiden **8** 1924 pp. 55–72 t.ff.

122.—Stiasny, G. Ueber einige von Dr. C. J. van der Horst bei Curaçao gesammelte Medusen. Bijdr. Dierk. Amsterdam **23** 1924 pp. 83–91 t.ff.

123.—Swartz, C. K. and **Prouty, W. F.** *Coelenterata* [Silurian]. Maryland Geol. Surv. Strat. Memoirs 1923.

124.—Tansey, V. O. The fauna and the correlation of the Bailey Limestone in the Little Saline Creek area of Ste. Genevieve County, Missouri. Missouri Bureau Geol. (2) **17** 1923 pp. 166–212 pls.

125.—Teissier, G. Organisation et fonctionnement du gonophore chez *Hydrallmania falcata* (L.). Bull. Soc. Zool. Paris **49** 1924 pp. 70–75 t.ff.

126.—Teissier, G. Observation des méduso'ides libres et des planulas de *Sertularia operculata* L. Bull. Soc. zool. France **47** 1923 pp. 357–361 t.ff.

127.—Thomas, A. O. Some large colonies of *Stromatopora* found near Iowa City, Iowa. Proc. Iowa Acad. Sci. Des Moines **30** 1924 pp. 467–470 t.f.

128.—Thomas, A. O. Some fossil corals from an outcrop in Des Moines. Proc. Iowa Acad. Sci. Des Moines **30** 1924 pp. 471–479 2 pls.

129.—Troedsson, G. T. Försök till jämförelse mellan Sveriges och Nordamerikas ordoviciska graptolitskiffrar. Geol. För. Förh. Stockholm **45** 1923 pp. 227–248. [English Summary.]

130.—Twenhofel, W. H. The Geology and Invertebrate Palaeontology of the Comanchean and "Dakota" formations of Kansas. Bul. State Geol. Survey Kansas No. **9** 1924 p. 51 pl. x.

131.—Vaughan, T. W. *see* **Clark, B. L.** and **Arnold, R.**

132.—Vollbrecht, E. Über den Bau von *Cosmophyllum* nov. gen. SitzBer. Ges. Natw. Marburg for **1921** 1922 pp. 17–34.

133.—Wedekind, R. Die Gliederung des Mitteldevons auf Grund von Korallen. SitzBer. Ges. Natw. Marburg for **1922** 1923 pp. 24–35 t.ff.

134.—Wedekind, R. Zur Kenntnis der Stringophyllen des oberen Mitteldevon. SitzBer. Ges. Natw. Marburg for **1921** 1922 pp. 1–34 t.ff.

135–136.—Wedekind, R. Das Mitteldevon der Eifel. Eine biostratigraphische Studie. 1. Teil. Die Tetrakorallen des unteren Mittledevon. Schr. Ges. Nat. Marburg **14** pt. 3 1924 pp. vii + 93 122 t.ff.

137.—Weill, R. La maturation de l'ovule d' *Haliclystus octoradiatus* J. Clark. C.R. soc. biol. Paris **90** 1924 pp. 442–444 t.ff.

138.—Welch, P. S. and **Loomis, H. A.** A limnological study of *Hydra oligactis* in Douglas Lake, Michigan. Anat. Rec. Philadelphia **29** 1924 p. 129.

139.—Welch, P. S. and **Loomis, H. A.** A limnological study of *Hydra oligactis* in Douglas Lake, Michigan. Trans. Amer. Microsc. Soc. Menasha Wis. **43** 1924 pp. 203–235.

140.—Wietrzykonski, W. Recherches sur le développement de l'*Edwardsia beautempsii*. Bul. Intern. Acad. Krakow **1914** B 1914 pp. 782–816 2 pls.

141.—Wulff, R. Das Famennien der Aachener Gegend. Jahrb. Geol. Landesanst. Berlin **43** 1923 pp. 1–70 2 pls. t.ff.

142.—**Yakovlev, N.** Sur la géologie de l'Oural de Solikamsk. Recherches geologiques faites dans la région houillère de Lounievka de l'Oural. Mem. Com. Géol. Petrograd (n.s.) **123** 1915 pp. 1–18 6 pls.

143.—**Yakowlew, N.** Studien über die Korallen Rugosa. Mem. Com. Géol. Petrograd (n.s.) **96** 1914 pp. 33 3 pls.

144.—**Zuffardi-Comerci, R.** *Subtilicyathus* nuovo genere di corallario. Boll. Uff. Geol. Ital. Roma **49** 1924 pp. 5 1 pl. t.ff.

II.—SUBJECT INDEX.

GENERAL AND MISCELLANEOUS.

Nomenclator generum et subgenerum (*Gorgonaria*), KÜKENTHAL **66.**

Fossil medusae; KIESLINGER, **60.**

Observations on Coelenterate fauna of Kei Islands and Amboina; MORTENSEN **83.**

Times of sexual maturity of Naples Hydroids; NEPPI **85.**

Key to species of *Zonophyllum*; WEDEKIND **135.**

Corals and coral-reefs.—HEDLEY, **53**; MINER, **81**; PRATJE, **101**; RIABININ, **105**; YAKOVLEV, **142.**

Irregularities in *Cassiopeia*; STIASNY, **122.**

Chimaera formation; GOETSCH, **43**; ISSAYEV, **56.**

Introduction to study of corals; HICKSON, **54.**

Cerianthid larvae; CARLGREN, **19.**

Longitudinal fission in *Actinia cori*; KWIETNIEWSKI, **67.**

STRUCTURE.

Muscles of *Carmarina*; SCHMIDT, **112.**

Histology of *Hydromedusae*; KÜHN, **64.**

PHYSIOLOGY.

Luminescence; NICHOLS, **87**; PIERANTONI, **100.**

Excretion of carbon dioxide in *Actinia*; PARKER, **90.**

Nerve transmission; PARKER, **89.**

Metabolism of budding *Hydra*; KOLODZIEJSKI, **61.**

Organic polarity in hydroids; LUND, **73.**

Photolytic disintegration and axial gradient in *Hydra*; HINRICHS **55.**

Experimental regression in Hydroid; CHILD, **23.**

Dedifferentiation and reduction in *Aurelia*; DE BEER and HUXLEY, **8.**

Pulsation of medusae compared with other muscular and ciliary contractions; GRAY, **49.**

Digestive processes in *Hydra*; FRISCH, **38.**

Food of Madreporaria; BOSCHMA, **15.**

Aktinin; ACKERMANN, HOLTZ & REINWEIN, **3.**

Extracts of *Actinia*; ACKERMANN, HOLTZ and REINWEIN, **2.**

Presence of Iron; SCHNEIDER, **113.**

Hermaphroditism in Hydroids; FÖYN, **37.**

DEVELOPMENT.

Maturation of ovule of *Haliclystus*; WEILE, **137.**

Edwardsia; WIETRZYKOWSKI, **140**; *Sertularia operculata*; TEISSIER, **126**; Gonophore of *Hydrallmania*; TEISSIER, **125**; *Craspedacusta ryderi*, PAYNE, **94**; Siphonophora; MOSER, **84**; *Diplograptus* and *Monograptus*; KRAFT, **62**; *Gonionêmus*; JOSEPH, **59**; Larvae of Anthozoa; CARLGREN, **19**; Fungids; BOSCHMA, **14**; *Caninia*; LEWIS, **70.**

Pedogenesis in Actiniaria; CARLGREN, **19.**

Asexual reproduction in *Sagartia* (? *Metridium*) *pallida*; EVANS, **35.**

Budding of *Tubularia*; HADZI, **50.**

Laceration, Budding and Metamorphosis in *Actinia equina*; LANDAUER, **68.**

Nematocysts; KÜHN, **64.**

ETHOLOGY.

Hydra in Douglas Lake; WELCH and LOOMIS, **139**; *Cordylophora*, ROCH, **108**; Medusae & Ctenophora; [LEBOUR], **69**; *Craspedacusta*, GARMAN, **39.**

Environment and size in *Hydra*; GOETSCH, **45**.

Growth forms of corals; BOSCHMA, **13**.

Commensalism.—Larva of *Peachia* sp. on *Phialidium*, [LEBOUR], **69**; Corals and Cirripedes; ANNANDALE, **77**; Mollusca and corals from Indian Ocean; MATTHAI, **75**; Hydroids and Algae; GOETSCH, **44**; Epizoanthids and Pagurids; CARLGREN, **18**; *Zooxanthellae* and corals; BOSCHMA, **15**; Pagurids, hydroids, corals and anemones; BALSS, **6**.

Colony-formation in *Rugosa*; YAKOWLEW, **143**.

Influence of temperature on production of free medusae or sporosaes in Hydroida; STECHOW, **117**.

VARIATION AND PHYLOGENY.

Rugosa, YAKOWLEW, **143**; Trachomedusae; JOSEPH, **59**; Graptolites, ELLES, **33**; Corals, SARDESON, **111**.

Medusa theory of Siphonophoran phylogeny; MOSER, **84**.

Trends in carboniferous corals; LANG, **68a**.

DISTRIBUTION.

1.—GEOGRAPHICAL.

A.—MARINE.

Atlantic (including Mediterranean).—North Sea, Plankton, PEACOCK, **95, 97**; Coy, **27.—Rockall Bank,** *Coelenterata*, DOLLFUS, **32.—Irish Coast,** *Coelenterata*, DELAP, **29.—Marocco,** *Madreporaria*, LIOUVILLE, **72.—Mediterranean,** *Alcyonaria* and *Madreporaria*, CECCHINI, **22**; *siphonophora*, NEPPI, **86**; *Hydroida*, NEPPI, **85.—Curaçao Id.,** *Anthozoa*, PAX, **93**; *Medusae*, STIASNY, **122**.

Indian Ocean.—*Anthozoa*, CARLGREN, **18**; *Madreporaria*, MATTHAI, **75**; New Javanese *Actiniaria*, PAX, **92**; *Hydroida* of W. and S.W. Australia, STECHOW, **118**.

Pacific Ocean.—N. Zealand *Hydroida*, BALE, **5**; New Japanese *Alcyonacea*, PAVLENKO, **91**; New Chinese *Scyphomedusae*, LIGHT, **71**; New Japanese *Actiniaria*, PAX, **92**; *Rhizostomae* from Manila, STIASNY, **120**; *Scyphomedusae* from Sydney, STIASNY, **121**; *Madreporaria*, MATTHAI, **75**; *Ceriantharia*, CARLGREN, **21**.

Arctic Ocean.—Greenland *Medusae*, JESPERSEN, **58**; New Barents Sea *Coelenterata*, DERJUGIN, **31**.

B.—FRESH WATER.

Microhydra in R. Main; STADLER, **116**; *Microhydra* near Eberswalde, BACKHOFF, **4**; *Craspedacusta* in Kentucky, GARMAN, **39**; Fresh-water jellyfishes, MILLER, **80**; *Annulella* in Gulf of Valencia, RIOJA, **106**; New Medusa, ROCH, **107**; Distribution of *Cordylophora*, ROCH, **108**; Medusae of Congo, SCHOUTEDEN, **114**; *Hydra* in Douglas Lake, Michigan, WELCH and LOOMIS, **139**.

2.—GEOLOGICAL.

Cainozoic.—Subfossil coral from Chilka lake, MATTHAI, **74**; Corals from Ligurian Appenines, PREVER, **102**; Corals from Mid-Eocene Shales near Vacaville, PALMER, **88**; N. German Miocene corals, KREJCI, **63**; Late Tertiary corals of Borneo, GERTH, **42**.

Mesozoic. — Cenomanian corals; KÜHN, **65**.

Palaeozoic.—Corals from the Famennien of Aachen, WULF, **141**; Corals of the Devonian of Missouri; BRANSON, **16**; TANSEY, **124**; STEWART, **119**; *Campophyllidae*, WEDEKIND, **134**; *Cyathophyllidae*, WEDEKIND, **133**; *Tetracoralla* of Lower Mid. Devonian, WEDEKIND, **136**; *Tetracoralla* of the Lower Middle Devonian, WEDEKIND, **135**; Silurian corals of Nova Scotia, MCLEARN, **78**; Silurian corals of Maryland, SWARTZ and PROUTY, **123**; *Calceola* in "Ilseschiefer" of S. Westphalia, REICH, **104**; Upper Visean Corals, LEWIS, **70**; Japanese corals, HAYASAKA, **52**; Lower Carboniferous corals of the Urals, PERNA, **99**; Carboniferous corals from Yorkshire, GARWOOD and GOODYEAR, **40**; L. Carboniferous corals of Sosoye, DEMANET, **30**; Rugose corals from Burindi of N.S. Wales, BENSON and SMITH, **10**; Graptolite zones of Sweden, Gt. Britain and New York, TROEDSSON, **139**; Victorian Graptolites, HARRIS, **51**; Graptolites of Sardinia, GORTANI, **47**; Graptolite beds in Unterharz, DAHLGRÜN, **28**; Graptolites in Maine, PERKINS, **98**; RUEDEMANN, **109**; Esthonian Graptolites, BEKKER, **9**.

III.—SYSTEMATIC.

HYDROZOA.

Aglaophenia pluma p. 10 figs.; *tubiformis* p. 11; *helleri* p. 24, NEPPI, **85**; *A. acanthocarpa* p. 258 fig., *laxa* type p. 260 fig., BALE **5**.

Annulella gemmata, RIOJA **106**.

Antennella secundaria p. 25, NEPPI, **85**.

Bougainvillia ramosa, NEPPI p. 2 figs. **85**; *B. superciliaris* p. 108, JESPERSEN, **58**.

Calycella parkeri Hilgendorf (type) p. 231, BALE, **5**.

Caminothujaria moluccana p. 59, BILLARD, **11**.

Campanularia australis **sp. n.** for *C. tincta* var. M. & Trebilcock 1914, W. Australia; *longitheca* **sp. n.** for *C. tincta* Hartlaub 1905 et auct, Falkland Is., Japan, Australia; *eurycalyx* **nom. n.** for *C. tincta* var. *eurycalyx* Hartlaub 1905 p. 61, STECHOW Zool. Anz. **59**; *C. calceolifera* p. 18 figs.; *hincksii* p. 19, NEPPI, **85**.

Campanulina humilis **sp. n.** p. 235 fig. N. Zealand, BALE Tr. Proc. N. Z. Inst. **55** 1924.

Chlorohydra, GOETSCH, **44**.

Cladocarpus dollfusi **sp. n.** Morocco, BILLARD Bull. Soc. zool. Paris **49** p. 87 fig.

Clytia volubilis p. 26, NEPPI, **85**.

Cordylophora p. 24, RYLOV **110**.

Corydendrium zelandicum **nom. n.** for *Tubiclava fruticosa* Hilgendorf 1898, STECHOW **118**.

Craspedacusta ryderi, PAYNE **94**.

Desmoscyphus pulchella p. 247, BALE **5**.

Diphasia heurteli **sp. n.**, BILLARD Rev. Suisse Zool. **31** p. 67 figs.; *D. attenuata* p. 62 fig., BILLARD, **11**.

Diphyes arctica p. 110, JESPERSEN, **58**.

Eleutheria robsonia p. 129, JOSEPH, **59**.

Eudendrium ramosum, NEPPI **85** p. 2.

Gemmaria implexa p. 7, NEPPI, **85**.

Gonionemus vindobonensis p. 129, JOSEPH, **59**.

Gonothyraea parkeri (Hilgendorf) type p. 231, BALE, **5**.

Halecium gracile p. 12 fig.; *robustum* p. 13 figs.; *pusillum* p. 15, NEPPI, **85**.

Haleremita cumulans, JOSEPH, **59**.

Halicornaria rostrata **sp. n.** N.Z. p. 264 figs., BALE Tr. Proc. N. Z. Inst. **55** 1924.

Hebella parasitica p. 19 fig., NEPPI, **85**.

Hemicarpus banksi Gray type p. 263, fig., BALE **5**.

Heterocordyle conybeari p. 21, NEPPI, **85**.

Hydra GOETSCH **44**.

Hydrallmania falcata, TEISSIER, **125**.

Lymnorea borealis p. 58, PEACOCK **97**.

Microhydra, PAYNE **94** p. 407; *M. germanica* **sp. n.** Berlin, ROCH Zool. Anz. **58** p. 131 t. ff.; *M. ryderi*, BACKHOFF, **4**.

Monotheca heteronoma **sp. n.** Naples, NEPPI, Pubbl. Staz. Napoli **3** 1924 p. 9 fig.

Obelia nodosa p. 230 fig., *coughtreyi* p. 230 fig. **spp. n.** N. Zealand, BALE Tr. Proc. N. Z. Inst. **55** 1924.

Orthopyxis crenata p. 232 figs., BALE, **5**.

Pasya, BILLARD p. 57 **11**; *P. decipiens*, STECHOW, **118**.

Pachycordyle neapolitana p. 5 fig., NEPPI **85**.

Pelmatohydra, GOETSCH, **44**.

Perigonimus neapolitanus p. 4 figs., NEPPI, **85**.

Plumularia heuteli; *quadridentata* p. 60, BILLARD **11**; *P. scabra* p. 60, BILLARD **11**; *P. setacea* p. 252 figs., *setacea* var. *opima* var. n. p. 254 fig., *wattsi* p. 254 fig., BALE, **5**; *P. nodosa* p. 67; *michaelseni* p. 68, **spp. n.**, S. W. Australia. Stechow Zool. Anz. **59**.

Pycnotheca mirabilis var. *robusta* **var. n.**, STECHOW, **118.**

Salacia sibogae **sp. n.**, Billard Rev. Suisse Zool. **31** 1924 p. 64.

Saphenia gracilis p. 59, PEACOCK, **97.**

Selaginopsis monilifera p. 237, BALE, **5.**

Sertaria, BILLARD p. 55, **11.**

Sertularella edentula **sp. n.** p. 237 fig., *johnstoni*, *columnaria*, *pygmaea* p. 239, *simplex* fig., *robusta*, *crassiuscula* **sp. n.** fig. p. 240, *integra*, *subarticulata*, *quadridens* p. 242, BALE Tr. Proc. N. Z. Inst. **55** 1924; *S. singularis* p. 59, BILLARD, **11**; *S. margaritacea*, p. 60; *allmani*; *antarctica* p. 61; *contorta* p. 61; *serrata* p. 62, BILLARD, **11**; *S. sibogae* **sp. n.** BILLARD Rev. Suisse Zool. **31** p. 69 fig.; *S. mediterranea* p. 22 figs., NEPPI, **85.**

Sertularia episcopus, *longicosta* p. 245, *fasciculata* p. 246, *furcata* p. 247, *bispinosa*, *unilateralis*, *trispinosa* p. 248, *minima* p. 249, BALE **5**; *S. gracilis* p. 8 fig., NEPPI, **85**; *S. bellis* **sp. n.** S. W. Australia, STECHOW Zool. Anz. **59** p. 65; *S. operculata* TEISSIER, **126.**

Silicularia bilabiata p. 233 fig., *campanularia* p. 234 BALE, **5.**

Syncoryne tenella p. 228, *eximia* p. 229, BALE, **5.**

Thecocarpus formosus, *chiltoni* **sp. n.** p. 261 fig., BALE Tr. Proc. N. Z. Inst. **55** 1924.

Thecocaulus heterogona **sp. n.** p. 255 figs., BALE Tr. Proc. N. Z. Inst. **55** 1924.

Thuiaria, BILLARD p. 54, **11**; *T. bicalycula* p. 243 fig., *farquhari* **sp. n.** N. Z. p. 244 fig., BALE Tr. Proc. N. Z. Inst. **55** 1924.

Tridentata rigida **sp. n.** S. W. Australia p. 62; *xantha* p. 64, STECHOW Zool. Anz. **59.**

Tubularia australis **nom. n.** for *T. gracilis* v. Lendenfeld 1885, STECHOW, **118.**

GRAPTOLITOIDEA.

†*Cardiograptus mersus* p. 95, HARRIS, **51.**

†*Climacograptus riddellensis* **sp. n.** p. 100 figs., HARRIS Proc. R. Soc. Victoria **36** 1924; †*C. scalaris* var. *normalis* p. 104 fig.; *tamariscus* p. 64 figs.; *serratus* p. 105 figs., GORTANI **48**; †*C. kuckersianus* p. 17 figs., BEKKER, **9.**

†*Cryptograptus rigidus* p. 59 figs.; *dispar* **f. n.** p. 61 figs.; *mediterraneus* **f. n.** p. 62 figs., GORTANI Palaeont. Ital. **28** 1922.

†*Didymograptus* (*Isograptus*) *caduceus* p. 102 figs., HARRIS, **51**; †*D. v-deflexus* **sp. n.** p. 93 figs., HARRIS Proc. R. Soc. Victoria **36** 1924.

Diplograptus p. 285, KRAFT, **62**; †*D. gnomonicus* p. 97, HARRIS, **51**; †*D. sardous* **f. n.** p. 46 figs., GORTANI Palaeont. Italica **28** 1922.

†*Glossograptus hincksii* p. 101, HARRIS, **51.**

†*Lasiograptus* (*Thysanograptus*) *etheridgei* **sp. n.** p. 98 figs., HARRIS Proc. R. Soc. Victoria **36** 1924.

†*Mesograptus modestus* p. 18 figs., BEKKER, **9.**

Monograptus p. 285, KRAFT, **62**; †*M. chapmanensis* **sp. n.** (for *M. priodon* mut. *c.*) p. 227, *colbiensis* **sp. n.** p. 226, Maine, RUEDEMANN Amer. J. Sci. New Haven Conn. **8** 1924; †*M. clintonensis* figs. p. 34; *wandalensis* fig. p. 35, MCLEARN **78**; †*M. tenuis* p. 106 fig. *distans* p. 106 figs.; *sedgwicki* p. 107 fig.; *lobiferus* p. 107 fig.; *millepeda* p. 108 fig., GORTANI **48**; †*M. meneghinii* var. *giganteus* **f. n.** p. 88 figs.; *tyrrenus* **f. n.** p. 89 figs.; *sardous* var. *eximus* **f. n.** p. 90 figs.; *gonii* p. 90 figs.; *lovisatoi* **f. n.** p. 92 figs.; *siren* **f. n.** p. 93 figs.; *belophorus* var. *laxus* **f. n.** p. 94 figs.; *ballaësus* **f. n.** p. 94 figs.; *M. antennularius* var. *floridus* **f. n.** p. 95 figs.; *subtilis* var. *maior* **f. n.** p. 95 figs., GORTANI Palaeont. Ital. **28** 1922; †*M. meneghinii* **f. n.** Sardinia p. 47 figs.; *sardous* **f. n.** p. 47 figs., var. *macilentus* **f. n.** p. 48 figs.; *vomerinus* p. 49 figs.; *hemipristis* p. 50 figs.; *gonii* p. 50 figs.; *linnarrsoni* var. *flumendosae* **f. n.** p. 51 figs.; *multiferus* p. 52 figs.; var. *elegans* **f. n.** p. 52 figs.; var. *strigosus* **f. n.** p. 53 figs.; *lamarmorae* p. 53 figs.; *proboscidatus* **f. n.** p. 54 figs., var. *laxus* **f. n.** p. 55 figs.; *tariccoi* p. 55 figs.; *falcatus* p. 56 figs.; *belophorus* p. 57 figs.; *antennularius* p. 58 figs.; *subtilis* **f. n.** p. 58 figs., GORTANI Palaeont. Ital. **28** 1922.

†*Oncograptus bi-angulatus* p. 96, HARRIS, **51.**

†*Retiograptus speciosus* **sp. n.** p. 99 figs., HARRIS Proc. R. Soc. Victoria **36** 1924.

†*Retiolites geinitzianus* mut. *venosus* fig. p. 34, MCLEARN, **78.**

†*Thamnograptus capillaris* p. 104, HARRIS, **51.**

†*Trigonograptus ensiformis* p. 97, HARRIS, **51.**

SCYPHOZOA.

Acromitoides purpureus p. 39 fig., STIASNY, **120.**

Acromitus tankahkeei **sp. n.** Amoy, China, LIGHT China J. Sci. Arts **2** 1924 p. 449 fig.

Anomalorhiza shawi p. 47, STIASNY, **120.**

Aurelia coerulea p. 69 fig., STIASNY, **121.**

Cassiopeia vanderhorsti **sp. n.** fig. p. 85; *ornata*; *andromeda* figs.; *picta*, p. 88, STIASNY Bijdr. Dierk. **23** 1924.

Catostylus mosaicus p. 66 fig., STIASNY, **121**; *C. townsendi* p. 43 fig., STIASNY, **120.**

Cotylorhizoides pacificus p. 50, STIASNY, **120.**

Lobonemoides robustus p. 45, STIASNY, **120.**

Lychnorhiza shawi (Light) p. 50, STIASNY, **120.**

Pelagia curaçaoensis **sp. n.** p. 84 fig. STIASNY Bijdr. Dierk **23** 1924.

Phyllorhiza pacifica (Light) p. 53, STIASNY, **120**; *P. punctata* p. 56 figs., STIASNY, **121.**

ANTHOZOA.

ALCYONARIA.

Acanella gigliolii p. 128 fig.; *mediterranea* p. 133 figs., CECCHINI, **22.**

†*Aulopora conferta*; *serpens* fig. 95 p. 23, FERRONNIÈRE **36.**

Bebryce mollis, p. 127, CECCHINI **22.**

†*Cladochonus alternans* p. 23 fig.; *perantiquus* p. 24 fig., FERRONNIERE, **36.**

Funiculina quadrangularis p. 137, CECCHINI, **22.**

Gersemia askoldi **sp. n.** Japan p. 325 figs., PAVLENKO Ann. Mus. zool. Acad. Sci. Petrograd **21** 1916.

Gorgonaria, KÜKENTHAL, **66.**

†*Heliopora böttgeri* p. 124, GERTH, **42.**

Kophobelemnon leuckarti p. 138, CECCHINI, **22.**

†*Syringopora ramulosa* p. 41, WULF, **141.**

ZOANTHARIA.

†*Acanthastraea echinata* p. 73, GERTH, **42.**

†*Acanthocyathus malayicus* **sp. n.** p. 57 figs. Borneo GERTH Samml. Geol. Reichs-Mus. Leiden **10** 1923.

Actinia bermudensis p. 100, PAX, **93.**

Aiptasia tagetes p. 106, PAX, **93.**

†*Alveopora polyacantha* p. 122; *daedalea* p. 122, GERTH, **42.**

†*Amphihelia alternans* **sp. n.** p. 99 figs., GERTH Samml. Geol. R.-Mus. Leiden **10** 1923; *A. oculata* p. 150, CECCHINI, **22.**

†*Amplexus cornuformis* var. *singularis* **var. n.** p. 7 fig.; *coralloides* var. *porrecta* **var. n.** p. 8 fig., PERNA **99.**

†*Amygdalophyllum etheridgei* p. 161 figs., BENSON & SMITH, **10.**

Anactinia pelagica [BARNARD] **7**; *A. pelagica* pp. 377, 400 figs.; *indiana*; *superficialis* p. 377, CARLGREN, **19.**

Anemonia kwoiam p. 11, PAX, **92**; *A. antillensis* **sp. n.** Curaçao p. 99 fig., PAX Bijdr. Dierk. **23** 1924.

†*Anisocoenia variabilis* **sp. n.** p. 93 figs., GERTH Samml. Geol. R.-Mus. Leiden **10** 1923.

†*Antillia constricta* p. 66 figs.; *orientalis* p. 67 fig., GERTH, **42.**

Apiactis denticulata p. 370, CARLGREN, **19.**

Arachnactis albida pp. 372, 386; *sibogae* p. 373; *valdiviae* **sp. n.** p. 373, 388 figs., CARLGREN Valdivia Exp. Res. **19** 8 1924.

Arachnanthus bockii **sp. n.** Fiji, CARLGREN Vid. Medd. Kjöbenhavn **75** 1924 p. 193 fig.

Asteractis conchilega p. 103 figs., PAX, **93.**

†*Astrocoenia minutissima* p. 94, GERTH, **42**; †*A. nidiformis* p. 51 fig., TWENHOFEL, **130**.

†*Astrophyllum* p. 46, WEDEKIND **135**; †*A.* key to species, p. 48, WEDEKIND, **136**.

†*Aulophyllum concentricum* **sp.n.** Ingleton p. 259 figs., GARWOOD & GOODYEAR Q. J. Geol. Soc. **80** 1924.

†*Aulopora repens* p. 55 fig., BRANSON, **16**; *A. tonolowayensis* Swartz **sp .n.** p. 398 figs., SWARTZ & PROUTY Maryland Geol. Surv. Strat. Memoirs Silurian 1923.

†*Axophyllum gracile* **sp. n.** Japan, HAGASAKA Sci. Rep. Tohoku Imp. Univ. Sendai Geol. **8** 1924 p. 23 figs.

Bartholomea annulata p. 107 figs., PAX, **93**.

Bunodactis michaelseni p. 11, PAX **92**; *B. curaçaoensis* **sp. n.** p. 102 fig.; *stelloides* p. 103, PAX Bijdr. Dierk. **23** 1924.

Bunodeopsis globulifera p. 100 figs., PAX, **93**.

Bunodosoma granuliferum; *kukenthali* p. 103, PAX, **93**.

†*Calceola sandalina*, "Ilseschiefer" S. Westphalia, REICH, **104**.

Calliactis tricolor p. 106, PAX, **93**.

Calpanthula guineensis pp. 380, 422 figs., CARLGREN, **19**.

†*Campophyllidae*, WEDEKIND **134**.

†*Caninia* p. 390, *juddi* p. 391 figs., var. *cambrensis* var. n. p. 397 figs.; *buxtonensis* **sp. n.** p. 400 figs., LEWIS Q. J. Geol. Soc. London **80** 1924.

†*Carcinophyllum pantopodum* **sp. n.** Urals, PERNA Mem. Com. Géol. Petrograd **175** 1923 p. 25 fig.; †*C. simplex*; *mendipense* p. 113, DEMANET, **30**.

†*Carruthersella compacta* p. 112 fig., DEMANET, **30**.

†*Caryophyllia arcotensis* p. 116 figs., COTTREAU, **26**; *C. clavus* p. 139; *arcuata* p. 140 fig., CECCHINI, **22**.

†*Ceratocyathus pressulus* p. 55 figs.; *curvatus* p. 56 figs., **spp. n.**, Borneo GERTH Samml. Geol. Reichs. Mus. Leiden **10** 1923.

Ceratopora grabaui **sp. n.** p. 56 figs.; *snyderensis* p. 56 figs., BRANSON Missouri Bur. Geol. (2) **17** 1923.

†*Ceratotrochus kefersteini* **sp. n.** Ordekenbrück KREJCI Centralbl. Min. Stuttgart **1923** p. 602; *C. magnaghii* p. 145 fig., CECCHINI **22**.

Cerianthéopsis p. 118, PAX, **93**.

Cerianthula mediterranea p. 378, 409 figs.; *braemi* **sp. n.** pp. 378, 409 figs.; *canariensis* **sp. n.** pp. 379, 416 figs.; *spirifer* p. 379; *michaelsarsi* **sp. n.** N. Atlantic pp. 379, 419 figs.; *melo* p. 380, CARLGREN Valdivia Exp. Res. 19 8 1924.

Cerianthus filiformis Misaki, p. 169 figs.; *japonicus*, Misaki p. 173 figs.; *mortensii* p. 175 figs. Mindora Id., **spp. n.**, CARLGREN Vid. Medd. Kjobenhavn **75** 1924; *C. valdiviae* **sp. n.** Indian Ocean, CARLGREN Valdivia Exp. Results **19** 7 1923 p. 245 figs.

Chermadion chinense p. 12, PAX, **92**.

†*Chonophyllum ellipticum* p. 51 figs., BRANSON **16**.

†*Cionodendron* **gen. n.** (*Rugosa*) *columen* **sp. n.** Burindi N.S.W. p. 165 figs., BENSON & SMITH Q. J. Geol. Soc. **79** 1923.

Cladocora stellaria p. 151, CECCHINI, **22**.

†*Clisiophyllum omaliusi* p. 41, WULF, **141**; *C. densilamellatum* **sp. n.** Urals PERNA Mem. Com. Géol. Petrograd **175** 1923 p. 24 fig.

†*Coclocoenia* **gen. n.** (*Eusmilidae*). *torulosa* **sp. n.** p. 62 figs.; *vacua* **sp. n.** Borneo p. 63, GERTH Samml. Ges. Reichs-Mus. Leiden **10** 1923.

†*Coeloria daedalea* f. *incrustans* **form. n.** p. 78; *naroetensis* **sp. n.** p. 78 fig.; *inaequiseptata* p. 79, GERTH Samml, Geol. R.-Mus. Leiden **10** 1923; *C. daedalea* p. 22 figs.; *sinensis*; *forskaelana* p. 23; *bottai*; *lamellina*; *stricta* p. 24; *astraeiformis* fig. 0. 25, MATTHAI, **75**.

Coeloseris mayeri p. 56, MATTHAI, **75**.

†*Comoseris sangkoelirangensis* **sp. n.** p. 110 fig., GERTH Samml. Geol. R.-Mus. Leiden **10** 1923.

Coscinaraea monile p. 57 fig., MATTHAI, **75**.

†*Cosmophyllum* **gen. n.** (*Campophyllidae*) p. 17 t. ff., VOLLBRECHT Sitz. Ges. Natw. Marburg for **1921** 1922.

†*Cyathophyllidae*, WEDEKIND, **133.**

†*Cyathophyllum halli* p. 49 figs., BRANSON, **16**; *C.* φ Vaughan p. 114 fig., DEMANET, **30.**

†*Cyathoseris crassilamellata* **sp. n.** p. 104 fig.; *phylloides* p. 150; *lophiophora* p. 105, GERTH Samml. Geol. R.-Mus. Leiden **10** 1923.

Cyclophyllum thomsoni p. 27; *instensis* p. 28 fig., PERNA **99.**

†*Cylicia smithi* p. 999 figs., MATTHAI, **74.**

Cyphastrea serailia; *chalcidicum* p. 7 MATTHAI **75**; *C. chalcidicum* p. 86; *gemmulifera* p. 86 fig.; *tubifera* **sp. n.** p. 87 figs.; *crassa* **sp. n.** p. 88 fig.; *monticulifera* p. 88, GERTH Samml. Geol. R.-Mus. Leiden **10** 1923.

Dactylactis armata p. 373; *digitata*; *malayensis*; *benedeni*; *viridis* p. 374, CARLGREN, **19.**

†*Deltecgathus australis* p. 49 figs.; *tuberculatus* **sp. n.** Borneo p. 50 figs., GERTH Samml. Geol. Reichs-Mus. Leiden **10** 1923; *D. reussi* **sp. n.** p. 603, KREJCI Centralbl. Min. Stuttgart **1923.**

Dendrophyllia ramea p. 151, CECCHINI, **22.**

Desmophyllum cristagalli p. 148, CECCHINI, **22.**

†*Dibunophyllum pseudoturbinatum* p. 30 fig.; *turbinatum* p. 31 fig.; *sociale* **sp. n.** p. 32 Urals, PERNA Mem. Com. Géol. Petrograd (n.s.) **175** 1923; *D. vaughani* **nom. n.** (for *D* Ø Vaughan) p. 259 figs.; *aspidiophylloides* **sp. n.** Ingleton p. 260; *rhodophylloides* **sp. n.** Penyghent p. 261 figs., GARWOOD & GOODYEAR Q. J. Geol. Soc. **80** 1924; *D. bourtonense* **nom. n.** (for D. Ø Vaughan and *D. vaughani* non Salée 1913), GARWOOD & GOODYEAR Geol. Mag. **61** 1924 p. 560.

†*Diploastraea heliopora* var. *borneensis* **var. n.** p. 74 GERTH, **42**; *D. heliopora* p. 10, MATTHAI, **75.**

†*Diplohelia complanta* **sp. n.** p. 100 figs., GERTH Samml. Geol. R.-Mus. Leiden **10** 1923.

†*Diplophyllum callawayensis* **sp. n.** BRANSON Missouri Bur. Geol. (2) **17** 1923 p. 50 fig.

†*Dohmophyllum* key to species, WEDEKIND **136**; *D.* p. 72 figs., WEDEKIND, **135.**

†*Echigophyllum giganteum* p. 20 figs., HAYASAKA, **52.**

†*Echinophyllia robusta* **sp. n.** p. 108 fig., GERTH Samml. Geol. R.-Mus. Leiden **10** 1923.

Echinopora lamellosa p. 8, MATTHAI, **75**; †*E. crassatina* p. 90; *pelarangensis* **sp. n.** p. 90 fig., GERTH Samml. Geol. R.-Mus. Leiden **10** 1923.

Edwardsia horsti **sp. n.** Curaçao p. 94 figs., PAX Bijdr. Dierk. **23** 1924.

Epizoanthus valdiviae **sp. n.** Indian Ocean p. 261 figs.; *studeri* **nom. n.** (for *E. cancrisocuis* Studer 1878 non Mart.) p. 265 figs.; *paguriphilus* p. 270 fig.; *parasiticus* p. 279 figs.; *chuni* **sp. n.**, Indian Ocean p. 281 figs.; *carcinophilus* **sp. n.** Cape p. 283 figs.; *micahelsarsi* **sp. n.**, N. Atlantic p. 287 figs. *lindahli* p. 290 figs.; *armatus* **sp. n.**, Indian Ocean p. 290 figs.; *fatuus* p. 293 figs.; *planus* **sp. n.**, Indian Ocean p. 296 figs.; *longiceps* p. 300, CARLGREN Valdivia Exp. Res. **19** 7 1923.

Euphyllia glabrescens; *fimbriata* fig. p. 34; *turgida* p. 35, MATTHAI, **75.**

†*Favia daedalaea* p. 73 fig.; *daedalaea* var. *haemisphaerica* **f. n.** p. 74 fig.; *confertissima* p. 75 *minima* p. 75 fig.; *cylindracea* p. 76 figs.; *perrandii* p. 77 fig.; *ponderosa* p. 77 fig.; *zuffardii* **f. n.** p. 78 fig.; *apennina* **f. n.** p. 79 fig.; *pulcherrima* p. 80 fig.; *profunda* p. 81 fig.; *irregularis* **f. n.** p. 82 fig., PREVER Palaeont. Italica **28** 1922; *F. favus* p. 10; *doreyensis*; *hululensis* fig. p. 11; *danae* fig.; *speciosa* figs. p. 12; *abdita* p. 13 figs.; *valenciennesi* figs.; *pentogona* p. 14; *versipora* figs. p. 16; *halicora* p. 17 figs.; *vasta* figs.; *favosa* p. 18 figs., MATTHAI, **75**; †*F. pallida*; *laxa* p. 72; *favus*; *macrocalyx* p. 73, GERTH, **42.**

†*Favosites niagarensis* fig. p. 32, MCLEARN **78**; †*F. helderbergiae* p. 177 figs.; *conicus* p. 178 figs., TANSEY, **124**; †*F. niagarensis* p. 396 figs.; *marylandicus* Prouty **sp. n.** p. 397 figs. Maryland Geol. Surv. Strat. Memoirs Silurian 1923; †*F. alpenensis* p. 53 figs.; *limitaris* p. 54 fig., BRANSON **16.**

†*Flabellum grippi* **sp. n.** Hemmoor p. 603; *pompeckji* **sp. n.** (for *L. roissyanum* Lindemann) p. 603; *waeli* var. *kautskyi* var. *n.* p. 604; *hemmoorense* **sp. n.** p. 604; *cristatum* var. *dietrichi* var. n. p. 604, KREJCI Centralbl. Min. Stuttgart **1923.**

Fungia patella; *distorta* p. 39 figs.; *cyclolites* p. 40; *somervillei* p. 41 figs.; *paumotensis*; *echinata* p. 42 figs.; *simplex*; *concinna*; *horrida* figs. p. 44; *subrepanda*; *danai* fig. p. 45; *scruposa*; *corona*; *fungites* p. 46, MATTHAI, **75**; †*F. echinata* f. *neogenica* form. n. p. 101; *patella* f. *borneensisfossilis* p. 101 fig.; *cycloites* p. 102, GERTH Samml. Geol. R.-Mus. Leiden **10** 1923.

†*Fungophyllia* gen. n. (*Lithophyllidae*) p. 64, *monstrosa* sp. n. p. 65 figs.; *aspera* sp. n. p. 65 figs. Borneo, GERTH Samml. Geol. R.-Mus. Leiden **10** 1923.

Galaxea fascicularis p. 8 fig.; *musicalis* p. 9 fig., MATTHAI, **75**.

†*Glossophyllum* p. 76 fig., WEDEKIND, **135**; †*G.* p. 76, WEDEKIND, **136**.

Goniastrea retiformis p. 20 fig.; *incrustans* p. 21 figs., MATTHAI **75**.

†*Goniopora planulata* p. 118 fig.; *affinis* p. 119; *astraeoides* p. 119, GERTH, **42**.

†*Gryptophyllum* p. 13, *denckmanni* p. 13 figs. sp. n.; *isactis* p. 15 figs., WEDEKIND Sitz. Ges. Natw. Marburg for **1921** 1922.

Heleanthopsis ritteri p. 15, PAX, **92**.

†*Heliophrentis bilateralis* var. *beechhillensis* var. *n.* figs. p. 31, MCLEARN, **78**.

†*Heliophyllum* p. 67 figs., WEDEKIND, **135**; †*H.* p. 67, WEDEKIND, **136**.

Hensenanthula dactylifera p. 380, CARLGREN, **19**.

†*Heptaphyllum* gen. n. L. Carbonif. Sligo p. 416, *gracile* sp. n. p. 417 fig.; *magnum* p. 420 fig., CLARK Geol. Mag. **61** 1924.

Herpetolitha limax p. 47 figs.; *foliosa*; *stricta* p. 48, MATTHAI, **75**.

Hydnophora exesa fig.; *microconus* p. 27, MATTHAI, **75**; †*H. tenella* p. 79; *astraeoides* p. 80, GERTH, **42**.

†*Hydnophyllia isseli* f. n. p. 49 figs.; *hyeroglíphica* f. n. p. 50 figs.; *pulchra* p. 50 fig.; *crispata* p. 52 fig.; *maeandrinoides* p. 52 figs.; *longicollis* p. 53 fig.; *cerebriformis* p. 54 fig.; *multisepta* p. 55 fig.; *valleculosa* p. 56 figs.; *dimorpha* p. 57 figs.; *bellardii* p. 58 figs.; *dalpiazi* f. n. p. 60 figs.; *intermedia* p. 61 figs.; *interrupta* p. 61 figs.; *italica* f. n. p. 62 fig.; *grandis* p. 36 fig.; *flexuosa* p. 63; *repanda* p. 65; *stellifera* p. 65 fig.; *profunda* p. 66 fig.; *serpentinoides* p. 67 figs.; *limitata* p. 69 fig.; *dubia* p. 69 fig.; *connectens* p. 70 fig.; *plana* f. n. p. 71 fig.; *formosissima* p. 72 fig.; *tenera* p. 72 figs., PREVER Palaeont. Italica **28** 1922; †*H. malayica* sp. n. p. 76 fig.; *applanata* sp. n. p. 76 fig., GERTH Samml. Geol. R.-Mus. Leiden **10** 1923.

†*Indophyllia borneensis* sp. n. p. 68 figs.; *cylindrica* p. 69 figs., GERTH Samml. Geol. R.-Mus. Leiden **10** 1923.

Isapiactis obconica p. 375, CARLGREN, **19**.

Isarachnactis gen. n. p. 375 *longipes* sp. n. Gibraltar pp. 375, 392 figs.; *lobiancoi* p. 375, CARLGREN Valdivia Exp. Res. **19** 8 1924.

Isarachnanthus (*Acontiferidae*) gen. n. p. 186, *bandanensis* p. 187 figs.; *panamensis* p. 190 figs., spp. n., CARLGREN Vid. Medd. Kjöbenhavn **75** 1924.

Isaurus duchassaingi var. *microtuberculata* var. *n.* p. 111 figs.; *gelatinosus* sp. n. Curaçao p. 116 figs., PAX Bijdr. Dierk. **23** 1924.

Isodactylactis tardiva p. 371; *discors*; *praecox*; *elegans* p. 372, CARLGREN **19**.

Isoedwardsia curaçaoensis sp. n. p. 97 fig., PAX Bijdr. Dierk. **23** 1924.

Isozoanthus giganteus p. 301 figs.; *arenosus* sp. n., Indian Ocean p. 330 figs.; *valdiviae* sp. n., Indian Ocean p. 331 figs.; *africanus* sp. n. Indian Ocean p. 333 figs., CARLGREN Valdivia Exp. Res. **19** 7 1923.

†*Keriophyllum* key to species, p. 70, WEDEKIND, **136**; †*K.* p. 69, WEDEKIND, **135**.

†*Koninckophyllum tenue* sp. n. p. 19; *longiseptum* sp. n. p. 19 Urals, PERNA Mem. Com. Géol. Petrograd **175** 1923.

Lebrunia danae p. 108, PAX, **93**.

†*Legnophyllum* subgen. n. (*Zonophyllum* gen. n. *Digonophyllidae*) p. 19 (for *Z. cylindricum* sp. n. p. 12), WEDEKIND Schr. Ges. Nat. Marburg **14** pt. 3 1924.

†*Lekanophyllum* gen. n. (*Digonophyllidae*) p. 29, *punctatum*; *kayseri* p. 34 figs.; *dohmi*; *auburgense* p. 35 spp. n., WEDEKIND Schr. Ges. Beför. Ges. Nat. Marburg **14** 3 1924.

Leptastrea roissyana p. 9, MATTHAI, **75**.

Leptoria phrygia p. 25, MATTHAI, **75**; †*L. concentrica* p. 81 fig., GERTH, **42**.

Leptoseris fragilis fig.; *hawaiiensis* p. 51; *digitata* p. 52 figs., MATTHAI, **75**;

†*L. speciosa* p. 106; *alternans* **sp. n.** p. 106 fig.; *floriformis* **sp. n.** p. 107 fig., GERTH Samml. Geol. R.-Mus. Leiden **10** 1923.

†*Lithophyllia grandissima* p. 64 figs., GERTH, **42**.

†*Lithostrotion somaense* p. 21 figs., HAYASAKA, **52**; †*L. junceum* p. 10 figs.; *portlocki* var. *paupercula* var. *n.* p. 13 fig.; *m'coyanum* p. 14 fig.; *caespitosum* p. 15 fig.; *baschkiricum* **sp. n.** p. 16 Urals; *irregulare* p. 17 figs., PERNA Mem. Com. Géol. Petrograd **175** 1923.

†*Lonsdaleia floriformis crassiconus* p. 22 figs.; *L.* (*Waagenophyllum*) *omiensis* p. 23 figs., HAYASAKA, **52**.

Lophohelia prolifera p. 149, CECCHINI, **22**.

†*Lophophyllum profundum* p. 472 figs., THOMAS **128**.

†*Madrepora fennemai* p. 115 fig.; *dubiosa* p. 116, GERTH, **42**.

†*Maeandrina lamellina* p. 77, GERTH, **42**.

Merulina ampliata p. 28 fig.; *laxa* p. 29 figs., MATTHAI, **75**; *M. laxa* p. 36 figs.; *prolifera* p. 37, BOSCHMA, **13**.

Minyas p. 463, CARLGREN, **19**.

†*Monticulastraea minima* **f. n.** p. 73, PREVER Palaeont. Italica **28** 1922; †*M. solidior* p. 80 fig., GERTH, **42**.

Mussa corymbosa; *brüeggemanni*; *echinata* p. 30, MATTHAI, **75**.

Myceduim okeni fig.; *aspera* figs. p. 58, MATTHAI, **75**.

†*Neospongophyllum* p. 10, *murale*, p. 12; *variabile* p. 12; *crassum* p. 13, **spp. n.**, t. ff., WEDEKIND Sitz. Ges. Natw. Marburg for **1921** 1922.

†*Neostringophyllum* p. 16, WEDEKIND, **134**.

†*Odontocyathus radiatus* p. 52 figs.; *sundaicus* p. 53 figs., **spp. n.**, Borneo, GERTH Samml. Geol. Reichs-Mus. Leiden **10** 1923.

†*Orbicella curta* p. 82; *irregularis* p. 82; *felixi* **sp. n.** p. 83 figs.; *tabulata* p. 84; *cyclommatos* p. 84 fig., GERTH Samml. Geol. R.-Mus. Leiden **10** 1923.

Ovactis brasiliensis p. 376, 398 figs.; *aequatorialis*; *bermudensis* p. 376; *wilsoni* p. 377, CARLGREN, **19**.

Pachycerianthus plicatus **sp. n.** Banda Id., p. 182 fig., CARLGREN Vid. Medd. Kjöbenhavn **75** 1924.

†*Pachyseris murchisoni* p. 112 fig.; *speciosa* p. 113 fig.; *denticulata* **sp. n.** p. 113 fig.; *distans* **sp. n.** p. 114 fig., GERTH Samml. Geol. R.-Mus. Leiden **10** 1923; *P. speciosa* p. 52 figs., MATTHAI, **75**.

Palaeozoanthus **gen. n.** *reticulatus* **sp. n.** Agulhas Bank p. 470 figs., CARLGREN Valdivia Exp. Res. **19** 8 1924.

Palythoa gregorii p. 257 fig.; *sansibarica* p. 258; *incerta* p. 259, CARLGREN, **18**; *P. brochi* p. 1 Guinea; *oorti* Cape of Good Hope p. 3 fig.; **spp. n.** *mammilosa*; *calcigena* Moluccas **sp. n.** p. 4 fig.; *atrogrisea* Poeloe-Weh; *buitendijki* Bay of Batavia p. 6; *irregularis* Poeloe-Weh. p. 8 fig.; *javanica* p. 9; *lithosphaera* Batavia p. 10 fig., **spp. n.**, PAX Zool. Meded. **8**; *P. caribaeorum* p. 109 fig.; *caracasiana* **sp. n.** Curaçao p. 110 figs.; *horstii* **sp. n.** Curaçao p. 111 fig., PAX Bijdr. Dierk **23** 1924.

Paradactylactis cerfensis p. 371, CARLGREN, **19**.

Paranactinia pilula p. 378, CARLGREN, **19**.

Parazoanthus fuegiensis, CARLGREN p. 335 **18**.

Pavonia decussata p. 53; *lata* figs.; *crassa*; *praetorta* fig. p. 54; *danai*; *divaricata*; *varians* p. 55; *venusta* p. 56, MATTHAI, **75**.

Pectinia quadrata p. 35, MATTHAI, **75**.

Peponactis aequatorialis p. 371, CARLGREN, **19**.

†*Phacellophyllum*, WEDEKIND, **134**.

Phellia rufa p. 104 fig.; *pseudoroseni* **sp. n.** Curaçao p. 105 figs., PAX Bijdr. Dierk. **23** 1924.

†*Phloeocyathus brunneus* p. 58, GERTH, **42**.

†*Phyllangia imbriacata* **sp. n.** p. 91 fig.; *divaricata* **sp. n.** p. 92 fig., GERTH Samml. Geol. R.-Mus. Leiden **10** 1923.

Phymanthus buitendijki **sp. n.** Poeloe-Weh, PAX Zool. Meded. **8** p. 12; *P. crucifer* p. 108, PAX, **93**.

†*Pleurodictyum lenticulare* p. 180, TANSEY, **124.**

†*Plocophyllia contorta* p. 82; *oligocenica* **f. n.** p. 84, PREVER Palaeont. Italica **28** 1922.

Podabacia crustacea p. 50, MATTHAI, **75.**

†*Polysolenia rutteni* **sp. n.** p. 121 figs., GERTH Samml. Geol. R.-Mus. Leiden **10** 1923.

Polyphyllia talpina p. 49; *novaehiberniae* p. 50, MATTHAI, **75.**

†*Porites amplectens* p. 117, GERTH, **42.**

†*Prionastraea borneensis* **sp. n.** p. 70 fig.; *pauciseptata* p. 71 fig., GERTH Samml. Geol. R.-Mus. Leiden **10** 1923.

Psammocora profundacella p. 57, MATTHAI, **75.**

†*Pseudozaphrentoides pseudozaphrentoides* **sp. n.** Orals, PERNA Mem. Com. Geol. Petrograd (n. s.) **175** 1923 p. 9.

†*Pseudozonophyllum* **gen. n.** (*Digonophyllidae*) p. 25, *halli* p. 28, *clarkei* p. 28, *logani* p. 29, **spp. n.**, WEDEKIND Schr. Ges. Nat. Marburg **14** pt. 3 1924.

†*Ptenophyllum* key to species p. 42, WEDEKIND, **136**; †*P.* p. 36, *nohrense* p. 42 figs.; *radiatum*; *princeps*; *filosa* p. 43 figs.; *simplex*; *involutum*; *coniforme*; *praematurum*; *torquatum*; p. 44 figs., WEDEKIND, **135.**

Radianthus kuekenthali p. 16, PAX, **92.**

†*Rhizophyllum tortworthense* **sp. n.** Upper Llandovery Glos. p. 29 figs., REED Geol. Mag. **61** 1924.

†*Rhodophyllum distans* **sp. n.** Penyghent p. 262 figs., GARWOOD and GOODYEAR Q. J. Geol. Soc. **80** 1924.

†*Rhopalophyllum* p. 61 figs., WEDEKIND, **135**; †*R.* key 6 species p. 61, WEDEKIND, **136.**

Sagartia elegans (Dalyell), EVANS **34**, p. 121.

Sagartia (? *Metridium*) *pallida* p. 185, EVANS **35.**

Sagartia rockallensis **sp. n.** Rockall Bank, CARLGREN Bul. Inst. Océan. Monaco **438** 1924 p. 27.

Sagartiogeton **gen. n.** (*Actiniaria, Sagartiidae*), *robustus* **sp. n.** Rockall Bank, CARLGREN Bul. Inst. Océan. Monaco **438** 1924 p. 26.

†*Scalariogyra* **gen. n.** (*Eusmilidae*) *escharoides* **sp. n.** Borneo, GERTH Samml. Geol. Reichs-Mus. Leiden **10** 1923 p. 61 fig.

†*Schlüteria emsti* **sp. n.**, WEDEKIND Sitz. Ges. Natw. Marburg **1921** 1922 p. 4 t.f.

Sclerophyllia margariticola p. 33 MATTHAI, **75.**

†*Seriatopora ornata* p. 95; *micrommata* p. 96 GERTH, **42.**

†*Siderastraea crenulata* p. 114 GERTH, **42.**

†*Siderastrea vancouverensis* **sp. n.**, VAUGHAN [in CLARK and ARNOLD] Univ. Col. Pub. Geol. Berkeley **14** 1924 p. 175 figs.

Solasteractis macropoda p. 370 CARLGREN, **19.**

†*Spinophyllum*, WEDEKIND, **134.**

Stenocyathus washingtoni p. 143 fig., CECCHINI, **22.**

†*Stephanocyathus magnificus* **sp. n.** p. 51 fig., GERTH Samml. Geol. Reichs-Mus. Leiden **10** 1923.

†*Stephanophyllia californica* p. 304 fig., *vacavillensis* **sp. n.** p. 304 figs., PALMER Univ. Cal. Pub. Geol. Berkeley **14** 1923.

Stichodactis papillosa p. 16 PAX, **92.**

Stoichactis helianthus p. 108 fig. PAX, **93.**

Stoichactis helianthus; *gigantea* p. 13 fig.; *ambonensis* p. 14 fig., *australis* Java p. 15 fig., PAX **92.**

†*Strephodes giganteus*; *murchisoni* p. 33 PERNA, **99.**

†*Streptelasma strictum* p. 177 figs. TANSEY, **124.**

†*Streptelasma cooperensis* **sp. n.** p. 48 figs., BRANSON Missouri Bur. Geol. (2) **17** 1923.

†*Striatopora missouriensis* p. 179 figs.; *bella* p. 179 figs. TANSEY, **124.**

†*Stringophyllum* p. 8, *normale* p. 9 figs.; *primordiale* p. 10; *difficile* p. 10, **spp. n.**, WEDEKIND Sitz. Ges. Natw. Marburg for **1921** 1922.

Stylophora tenuissima **sp. n.** p. 97 fig.; *verrucosa* **sp. n.** p. 97 figs.; *coalescens* **sp. n.** p. 98 figs.; *gemmans* **sp. n.** p. 98 fig.; *sokkohensis* p. 98, GERTH Samml. Geol. R.-Mus. Leiden **10** 1923.

†*Subtilicyathus* **gen. n.** (*Turbinolidae*) **p. 3,** *zanoni* **sp. n.** Miocene, Fuehat p. 4 figs., ZUFFARDI-COMERCI Boll. Uff. Geol. Ital. **49** 1924.

Symphyllia sinuosa; *radians* p. 31; *agaricia* p. 32; *valenciennesi* p. 33 figs.; *indica* p. 33 MATTHAI, **75.**

Synarachnactis bournei p. 368; *brachiolata*; *africana* **sp. n.** p. 369, 381 figs.; *membranacea* p. 369 CARLGREN, **19.**

Syndactylactis **gen. n.** p. 369, *chuni* **sp. n.** p. 369, 383 figs.; *mammillata* p. 369; *inermis* p. 370 CARLGREN, **19.**

†*Synhelia squarrosa* **sp. n.** Cenomanien Kutná Hora p. 32 figs., KUHN Sbornik Statn. Geol. Ust. Ceskoslov. **4** 1924.

†*Syringopora ramulosa* p. 116 fig.; *distans* p. 118 DEMANET, **30.**

†*Tetradium* p. 1 figs. SARDESON, **111.**

†*Thysanophyllum simplex* p. 22 fig.; *successor* p. 23 fig., **spp. n.,** Urals, PERNA Mem. Com. Géol. Petrograd **175** 1923.

Trachyphyllia amarantum p. 26 fig. MATTHAI, **75.**

†*Trematophyllum* p. 72 WEDEKIND, **135**; †*T.* key to species, WEDEKIND **136.**

Tridachophyllia lactuca p. 36 figs. MATTHAI, **75.**

†*Trochocyathus merriami* p. 305 figs., PALMER, **88**; †*T. schmidti* **sp. n.** Borneo p. 54 figs., GERTH Samml. Geol. Reichs-Mus. Leiden **10** 1923.

†*Trochoseris florescens* p. 103 fig. GERTH, **42.**

†*Trochosmilia gigantea* **sp. n.** Tertiary Borneo, GERTH Samml. Geol. Reichs-Mus. Leiden **10** 1923 p. 59 fig.

†*Turbinaria tenuis* p. 123 fig. GERTH, **42.**

†*Turbinolia dickersoni* p. 306 figs. PALMER, **88.**

Urticina felina p. 11, PAX, **92.**

†*Zaphrentis cornuformis* **sp. n.** p. 221 figs.; *salinensis* **sp. n.** p. 221 figs. STEWART Missouri Bur. Geol. (2) **17** 1923.

Zoanthina sp. p. 424, CARLGREN, **19.**

Zoanthus sociatus figs.; *pulchellus* p. 109 PAX, **93**; *Z. valdiviae* **sp. n.** Diego Garcia, CARLGREN Valdivia Exp. Res. **19** 7 p. 255 fig.

†*Zonophyllum* **gen. n.** (*Digonophyllidae*) p. 12, *cylindricum* **sp. n.** p. 12 fig. *duplicatum* **sp. n.** p. 14 figs.; *zentrale* p. 15 figs.; *primum* p. 20 figs.; *caducum* p. 20 figs.; *rauffi* p. 20 figs.; *solidum* p. 21 figs., WEDEKIND Schr. Ges. Beför. ges. Nat. Marburg **14** 3 1924.

INCERTAE SEDIS.

†*Bradya tergestina* p. 17, SILVESTRI, **115.**

†*Carelozoon* **gen. n.,** *jatulicum* **sp. n.** p. 50 figs., METZGER Bull. Com. Geol. Finland **64** 1924.

†*Malacostroma concentricum* p. 27 figs.; *timanicum* **sp. n.** p. 28 figs. Urals, RIABININ Mem. Com. Géol. Petrograd **123** 1915.

Stromatolites **gen. n.** Permian Madagascar, BRIÈRE Ann. Pal. Paris **12** 1923 p. 132.

†*Stromatopora coralvillensis* **sp. n.,** THOMAS Proc. Iowa Acad. Sci. **30** 1924 p. 470; †*S. constellata* p. 399 figs., SWARTZ and PROUTY, **123.**

Stromatoporella cracoviensis p. 90 figs., JAROSZ, **57.**

†*Uralotimania* **gen. n.** *reticulata* **sp. n.** upper Carbonif. Urals, RIABININ Mem. Com. Géol. Petrograd **123** 1915 p. 29 figs.

V. ECHINODERMA

ARRANGED BY

H. B. PRESTON

CONTENTS

	PAGE
I. Titles	2
II. Subject Index	11
III. Systematic Index :—	
Holothurioidea	14
Echinoidea	14
Asteroidea	18
Ophiuroidea	21
Crinoidea	23
Cystidea and Edrioasteroidea	30
Blastoidea	30

I.—TITLES.

1.—Abrard, R. Note sur les dépôts éocénes des environs de Royan. Bul. Soc. geol. Paris **23** 1924 pp. 377–380.

2.—Alemagna, C. Osservazioni geologiche nei dintorni di Buccheri in provincia di Siracusa. Atti Acc. Gioenia Catania Ser. 5 **12** 1919–1920 Mem. xxiii pp. 1–12.

3.—[Anon.] Suspension of rules in the case of *Holothuria* and *Physalia.* Smithsonian Misc. Collect. Washington **73** 1924 No. 2 Opinion 80 pp. 17–18.

4.—Barrois, J. Développement des échinodermes accompagné de quelques remarques sur l'origine des procordés. Ann. sci. nat. (Zool.) Paris **7** 1924 pp. 337–436 pls. i–xviii.

5.—Bassoli, G. G. Echinodermi terziari di Cirenaica. Atti Soc. nat. mat. Modena **53–54** 1924 pp. 104–107.

6.—Bather, F. A. Echinoderma, Annelida and Coelentera in Gray's "Spicilegia Zoologica". Conclusion. London: Janson & Sons **1924** pp. 18–20 pl. xii.

7.—B[ather], F. A. Pighude Echinodermer. Af. Th. Mortensen . . Nature London **114** 1924 p. 747.

8.—Bather, F. A. *Saccocoma cretacea* n. sp.: A Senonian Crinoid. Proc. Geol. Ass. London **35** 1924 pp. 111–121.

9.—Becher, E. Über den feineren Bau der Skelettsubstanz bei Echinoideen, insbesondere über statische Strukturen in derselben. Zool. Jahrb. Jena Abt. 3 Algem. Zool. **41** 1924 pp. 179-244 pl. ii.

Benoit, C. *vide* Portes, F.

Bohn, G. *vide* Drzewina, A.

10.—Bonnet, A. Sur l'appareil digestif et absorbant de quelques échinides réguliers. C.R. Acad. sci. Paris **179** 1924 pp. 846–848.

Bonnet, A. *vide* Koehler, R.

11.—Borley, J. O. The marine deposits of the Southern North Sea. Min. Agric. Fish. London Fishery Investigations Ser. 2 **4** 1923 No. 6 pp. 1–73.

12.—Boschma, H. Über einen Fall von Kopulation bei einer Asteride (*Archaster typicus*). Zool. Anz. Leipzig **58** 1924 pp. 283–285.

13.—Boswell, P. G. H. The faunal relations of the crag deposits of the Bently District, Suffolk. Proc. Geol. Ass. London **35** 1924 pp. 212–218.

14.—Branson, E. B. The Devonian of Missouri. With chapters on The Bailey limestone by **Tansey,** V. O. and The Little Saline Limestone by **Stewart,** G. A. Missouri Bur. Geol. Mines Rolla Miss. **1922** pp. 1–279 pls. i–lxxi.

15.—Buen, O. de. Croisiére de la Giralda (1920–1921). Liste des operations. Bul. Inst. Océan. Monaco No. **445** pp. 1–15.

16.—Burfield, S. T. A new species and a new variety of Ophiuroid with notes on a collection of Ophiuroidea from the Sudanese Red Sea. Ann. Mag. Nat. Hist. London Ser. 9 **13** 1924 pp. 144–154.

17.—Čachotin, S. S. Sur le transport des produits sexuels vivants des échinides à St. Petersbourg pour les recherches de biologie expérimentale. Bul. Acad. Sci. Russ. St. Petersbourg **8** 1914 pp. 737–743. [In Russian.]

18.—Cannon, A. J. S. Discovery of *Ophiolepis damesii.* Trans. Leicester Lit. Phil. Soc. **25** 1924 p. 46.

19.—Carter, G. S. On the early development of the echinoderm egg. i. The visible changes following fertilisation and artificial parthenogenesis on the surface of the egg of *Sphaerechinus granularis.* Proc. Cambridge Phil. Soc. (Biol. Sci.) **1** 1924 pp. 79–83.

20.—Carter, G. S. On the early development of the echinoderm egg. ii. The effects of changes in the surrounding medium on the initiation of development and on membrane-formation. Proc. Cambridge Phil. Soc. (Biol. Sci.) **1** 1924 pp. 84–104.

21.—Carter, G. S. On the early development of the echinoderm egg. iii. A note upon the relation of parthenogenesis to haemolysis Proc. Cambridge Phil. Soc. (Biol. Sci.) **1** 1924 pp. 105–107.

Cattell, W. *vide* Lillie, R. S.

22.—Chadwick, H. C. On some abnormal and imperfectly developed specimens of the sea urchin *Echinus esculentus*. Proc. Zool. Soc. London **1924** pp. 163–172.

23.—Chambers, R. Changes in protoplasmic consistency and their relation to cell division. J. Gen. Physiol. Baltimore **2** 1920 pp. 49–68.

24.—Chambers, R. The formation of the aster in artificial parthenogenesis. J. Gen. Physiol. Baltimore **4** 1922 pp. 33–44.

25.—Chambers, R. A microinjection study on the permeability of the starfish egg. J. Gen. Physiol. Baltimore **5** 1923 pp. 189–193.

26.—Chambers, R. The mechanism of the entrance of sperm into the starfish egg. J. Gen. Physiol. Baltimore **5** 1923 pp. 821–829.

27.—Checchia-Rispoli, G. Sopra due Clipeastri del Miocene Medio della Sardegna. Boll. R. Uff. geol. Ital. Roma **49** 1923 No. 4 pp. 1–8 1 pl.

28.—Checchia-Rispoli, G. ii. Echinidi in **Zaccagna,** D. Itinerari geologici nella Tripolitania occidentale. Mem. Descr. Carta Geol. Ital. Roma **18** 1919 pp. 86–93 pls. iii–iv.

29.—Checchia-Rispoli, G. Sui terreni terziari inferiori del versante settentrionale delle Madonie. Mem. serv. alla Descr. C. geol. Ital. **6** pt. 2 1916 pp. 1–109 pls. i–ix. [Echinoderma at p. 72.]

30.—Checchia-Rispoli, G. Fauna del Neocretacico della Tripolitania. Echinidi. Mem. serv. alla Descr. Carta Geol. Ital. Roma **8** pt. 2 1921 pp. 1–31 pls. vii–ix.

Chumley, J. *vide* Murray, J.

31.—Clark, A. H. A monograph of the existing crinoids. Bull. U. S. Nat. Mus. Washington **82** [1921] pp. i–xxv 1–795 pls. i–lvii.

32.—Clark, A. H. The Danish Ingolf-Expedition, pt. 5. Crinoidea. Danish Ingolf Exped. Copenhagen **4** 1923 pp. 1–58.

33.—Clark, H. L. The echinoderm fauna of South Africa. Ann. S. Afric. Mus. Cape Town **13** 1923 pp. 221–435 pls. viii–xxiii.

34.—Clark, H. L. The holothurians of the Museum of Comparative Zoölogy. The Synaptinae. Bul. Mus. Comp. Zool. Cambridge Mass. **65** 1924 pp. 459–501 pls. i–xii.

35.—Clark, H. L. Some holothurians from British Columbia. Canad. Field Nat. Ottawa **38** 1924 pp. 54–57.

Clowes, G. H. A. *vide* Smith, H.W.

Cole, K. S. *vide* Rogers, C. G.

36.—Cornet, J. Le Cénomanien entre Mons et l'Escaut. Ann. Soc. géol. Belgique Liège **46** 1923 pp. M21–M66.

37.—Corroy, G. Molières, Gammal, Saint-Ambroix. Excursion du 13 septembre. Bul. soc. géol. Paris **23** 1924 pp. 473–481.

38.—Corroy, G. Brouzet, La Serbe du Bouquet, Seynes, Klippe de la Liquiere. Excursion du 15 septembre. Bul. soc. géol. Paris **23** 1924 pp. 484–487.

39.—Cottreau, J. Paléontologie de Madagascar. Fossiles crétacés de la cote orientale. Ann. paléont. Paris **11** 1922 pp. 109–192 pls. i–xix [Echinoderma at p. 8.]

40.—Courrier, R. Nouvelles remarques sur la membrane de fécondation de l'oeuf d'oursin (*Paracentrotus lividus*). C.R. Acad. sci. Paris **178** 1924 pp. 249–251.

41.—Courrier, R. Perméabilisation expérimentale de l'œuf vierge d'oursin (*Paracentrotus lividus*). C.R. Acad. sci. Paris **178** 1924 pp. 597–598.

42.—Crózier, W. J. On the rôle of an integumentary pigment in photoreception in *Holothuria*. J. Gen. Physiol. Baltimore **3** 1921 pp. 57–59.

43.—Currie, E. D. On fossil echinoidea from the Aru Islands. Geol. Mag. London **61** 1924 pp. 63–72 pl. iv.

44.—Daguin, F. Renseignements sur les couches a *Helix* du Rarb. J. conchyliol. Paris **68** 1924 pp. 153–154.

45.—Dakin, W. J. and **Fordham, M. G. C.** The chemotaxis of spermatozoa and its questioned occurrence in the animal kingdom. Brit. J. Exp. Zool. Edinburgh **1** 1924 pp. 183–200.

46.—Dalcq, A. Une méthode nouvelle de parthénogénèse expérimentale. Ann. bull. soc. roy. sci. med. nat. Bruxelles **1924** pp. 175–187.

47.—Dalcq, A. Sur une méthode nouvelle de parthénogénèse expérimentale et son interprétation. C.R. Acad. Sci. Paris **179** 1924 pp. 1358–1361.

47a.—Dalcq, A. Les propriétés du cytoplasme dans l'oeuf en maturation et l'expulsion des globules polaires. C.R. Assoc. Anat. Paris **18** 1923 pp. 173–190.

48.—Dalcq, A. Effets des solutions hypotoniques sur la maturation de l'oeuf d'*Asterias glacialis*. C.R. soc. biol. Paris **90** 1924 pp. 958–961.

49.—Dalcq, A. L'arrét expérimental des cinèses de maturation et la réaction propre de l'oeuf chez *Asterias glacialis*. C.R. soc. biol. Paris **90** 1924 pp. 961–964.

De Forest, D. M. *vide* Mavor, J. W.

50.—Derjugin, K. Das Barents-Meer längs dem Kola-Meridian (33° 30′ östl. L.). Intern. Rev. Hydrobiol. Leipzig **12** 1924 pp. 145–174.

51.—Dietrich, W. O. Zur Paläontologie und Stratigraphie der Kreide und des Tertiärs in der ostkaribischen Kordillere Venezuelas. Centralbl. Min. Stuttgart **1924** pp. 181–187.

52.—Döderlein, L. Die Asteriden der Siboga-Expedition. ii. Pentagonasteridae. Siboga-Expeditie **98** (Mon. 46²) Leiden E. J. Brill pp. 49–69 pls. xiv–xix.

53.—Dollfus, R. P. Contribution à la faune des invertébres du banc de Rockall. [Materiaux récoltés par M. G. Hamel pendant la croisière du "Pourquoi Pas?" sous le Commandement du Dr. J. B. Charcot.] Bul. Inst. Océan. Monaco No. **438** 1924 pp. 1–28. [Echinoderma at p. 11.]

54.—Driesch, H. Die ersten Blastomeren des Seeigelkeimes. Arch. Entw. Mech. Berlin **52** 1923 pp. 671–672.

55.—Drzewina, A. and **Bohn, G.** Un nouveau cas d'hermaphrodism chez l'oursin, *Strongylocentrotus lividus*. C.R. Acad. sci. Paris **178** 1924 pp. 662–663.

56.—Duval, M. Réaction ionique du sang de quelques invertébrés. C.R. Acad. sci. Paris **179** 1924 pp. 1629–1631.

57.—Ehlers, G. M. and **Leighly, J. B.** *Libsanocystis traversensis*, a new cystid from the Devonian of Michigan. Papers Mich. Acad. Sci. **2** 1923 pp. 155–164 pl. x.

58.—Elles, G. L. Evolutional palaeontology in relation to the lower Palaeozoic rocks. Rep. Brit. Ass. London **91** 1924 pp. 83–107.

59.—Elmhirst, R. Notes on the breeding and growth of marine animals in the Clyde Sea Area. Rep. Scott. Marine Biol. Ass. Glasgow **1922** for 1923 pp. 19–43. [Echinoderma at p. 26.]

60.—Ephrussi, B. Sur les vitesses de segmentation de l'oeuf d'oursin. C.R. Acad. sci. Paris **179** 1924 pp. 79–82.

61.—Ephrussi, B. Action d'une température éleveé sur les œufs vierges d'oursin. C.R. soc. biol. Paris **91** 1924 pp. 162–164.

62.—Ephrussi, B. Sur la formation de caryomérites dans l'œuf d'oursin sous l'influence d'une température élevée. C.R. soc. biol. Paris **91** 1924 pp. 254–255.

63.—Fadda, G. and **Sciacchitano, I.** Il soles polare e la membrana de fecondazione nelle uova di riccio di mare. Atti Acc. Lincei Roma **33** Sem. i 1924 pp. 456–458.

64.—Fedotov, D. M. Einige Beobachtungen über die Biologie und Metamorphose von *Gorgonocephalus*. Zool. Anz. Leipzig **61** 1924 pp. 303–311.

65.—Fedotov, D. M. Zur Morphologie des axialen Organkomplexes der Echinodermen. Zs. wiss. Zool. Leipzig **123** 1924 pp. 209–304.

66.—Fisher, W. K. The genus *Scelerasterias* Perrier. Bul. Inst. Océan. Monaco No. **444** 1924 pp. 1–8.

67.—Fisher, W. K. A remarkable new sea-star from Japan. Proc. U. S. Nat. Mus. Washington **64** No. 2493 1924 pp. 1–6 pls. i–ii.

Fordham, M. G. C. *vide* Dakin, W. J.

Foerste, A. F. *vide* Slocom, A. W.

68.—Fossa-Mancini, E. L'Opera Scientifica di Domenico Lovisato. Boll. Soc. geol. ital. Roma **43** 1924 pp. 139–150.

69.—Fourtau, R. Catalogue des invertébrés fossiles de l'Egypte représentés dans les collections du Musée de Geologie au Caire. Terrains Jurassiques. 1re Partie: Echinodermes. Geol. Surv. Egypt Palaeont. Ser. **6** 1924 pp. 1–39 pls. i–v.

70.—Fox, H. M. The spawning of echinoids. Proc. Cambridge Phil. Soc. (Biol. Sci.) **1** 1924 pp. 71–74.

71.—Franz, V. Geschichte der Organismen. Gustav Fischer Jena **1924** pp. i–xiii i–948. [*Non vidi.*]

72.—Garcias i Font. Invertebrats marins de Mallorca. Butll. Inst. Catal. N. H. **3** 1923 pp. 80–81.

73.—Gaster, C. T. A. The Chalk of the Worthing District, Sussex. Proc. Geol. Ass. London **35** 1924 pp. 89–110 pl. viii.

74.—Gislén, T. Notes on the remarkable discovery of two echinoderms new to the Swedish fauna. Ark. Zool. Stockholm **15** 1924 No. 23 pp. 1–30.

75.—Gislén, T. Echinoderm Studies. Academical Dissertation. Zool. Bidr. Uppsala **9** 1924 pp. i–iv + 1–316.

76.—Glaser, O. Fertilization, cortex and volume. Biol. Bull. Wood's Hole Mass. **47** 1924 pp. 274–283.

77.—Godlewski, E. Plazura i jądro w okresach dojrzewania i początku rozwoju zarodków szkarłuprei.—Kernplasmarelation bei der Eireifung und in den ersten Entwicklungsphasen der Echinodermenkeime. Bul. Intern. Acad. Kraków **1917 B** pp. 102–113. [In German.]

78.—Godlewski, E. Sur l'inactivation du sperme d'oursin par le sperme d'éspèces étrangères. C.R. soc. biol. Paris **91** 1924 pp. 84–86.

79.—Goldring, W. The Devonian crinoids of the State of New York. Mem. New York State Mus. Albany **16** 1923 pp. 1–670 pls. i–lx.

80.—Goldschmidt, E. On a new *Asterias* from Chile. Ann. Mag. Nat. Hist. London Ser. 9 **13** pp. 499–502.

81.—Gray, J. The mechanism of cell-division. i. The forces which control the form and cleavage of the eggs of *Echinus esculentus*. Proc. Camb. Phil. Soc. (Biol. Sci.) **1** 1924 pp. 164–188.

82.—Gregory, J. W. On some cretaceous echinoidea from the neighbourhood of Lobito Bay. Trans. R. Soc. Edinburgh **51** 1917 pp. 585–588.

83.—Grobben, K. Theoretische Erorterungen betreffend die phylogenetische Ableitung der Echinodermen. Sitz.Ber. Ak. Wiss. Wien Abt. i 1923 pp. 263–290. [*Non vidi.*]

84.—Gumbel, E. J. and **Landauer,** W. Statistische Untersuchungen über Korrelation und Symmetrie bei Echinoideenpluteis. Arch. mikroskop. Anat. Entw. Berlin **101** 1924 pp. 62–91.

85.—Hallez, —. Fossiles provenant de la partie supérieure de la craie exploitée dans la carrière de Bettignies à Binche. Ann. Soc. géol. Belgique **47** 1924 p. B 109.

86.—Hawkins, H. L. Notes on a new collection of fossil echinoidea from Jamaica. Geol. Mag. London **61** 1924 pp. 312–324 pl. xviii.

87.—Hayasaka, I. On the fauna of the anthracolithic limestone of Ômi-Mura in the Western part of Echigo. Sci. Rep. Tohohu Imp. Univ. Sendai Ser. 2 Geol. **8** 1924 pp. 1–83 pls. i–vii. [Echinoderma at p. 61.]

88.—Heilbrunn, L. V. The surface tension theory of membrane elevation. Biol. Bull. Wood's Hole Mass. **46** 1924 pp. 277–280.

89.—Hentschel, C. C. On a new ciliate, *Cryptochilum boreale* nov. sp., from the intestine of *Echinus esculentus* Linn., together with some notes on the ciliates of echinoids. Parasitol. Cambridge **16** 1924 pp. 321–328.

90.—Hewitt, H. D. Notes on some chalk sections in the district around Thetford, Norfolk. Proc. Geol. Ass. London **35** 1924 pp. 220–244.

91.—Heyde, H. C. van der and **Oomen,** H. A. P. C. Sur l'existence chez les étoiles de mer d'une digestion intracellulaire. Arch. internat. physiol, Liège-Paris **24** 1924 pp. 41–53.

92.—Hildebrand, E. Geologie und Morphologie der Umgebung von Westheim a. M. Karl Henn Freiburg i Br. **1924** pp. 1–79 pls.

93.—Holtz, F. and **Thielmann,** F. Über die Extraktstoffe von *Arbatia* [*Arbacia*] *pustulosa*. Zs. Biol. München **81** 1924 pp. 296–298.

94.—Ihering, H. von. Die Kreide-Eocän-Ablagerungen der Antarktis. Neues Jahrb. Min. Geol. Paläont. Stuttgart Beil. Bd. **51** 1924 pp. 240–301.

95.—Innocenti, G. Degli. Fossili eocenici dell Istria. Atti Acc. Lincei Roma **33** Sem. i 1924 pp. 298–299.

96.—Innocenti, G. Degli. Due nuovi echinidi dell' Eocene Istriano. Riv. ital. paleont. Perugia **30** 1924 pp. 41–44 pl. ii.

97.—Irving, L. Ciliary currents in starfish. J. Exp. zool. Philadelphia **41** 1924 pp. 115–124.

98.—Israelsky, M. C. Notes on some echinoids from the San Rafael and Tuxpam beds of the Tampico Region, Mexico. Proc. Cal. Acad. Sci. San Francisco **13** (No. 8) 1924 pp. 137–145 pls. ii–iv.

99.—Jekelius, E. A brassói hegyek mezozoos faunája. Magyar Kir. Foldt. Budapest **24** 1916 pp. 1 [220]–98 [314] pls. iv–vi. [Echinoiderma at p. 8 [224].]

100.—Jordan, E. K. Quaternary and recent molluscan faunas of the West Coast of Lower California. Bul. S. Cal. Acad. Sci. Los Angeles **23** 1924 pp. 145–156.

101.—Kindred, J. E. The origin of the "amebocytes with spherules" in *Arbacia*. Anat. Rec. Philadelphia **29** 1924 p. 104.

102.—Kindred, J. E. The cellular elements in the perivisceral fluid of echinoderms. Biol. Bull. Wood's Hole Mass. **46** 1924 pp. 228–251.

103.—Koehler, R. Les echinodermes des mers d'Europe. Paris Librairie Octave Doin, Gaston Doin Editeur **1** 1924 pp. 1–362 9 pls.

104.—Koehler, R. and **Bonnet,** A. Documents pour servir à l'étude de la variation chez les échinides. Bul. Inst. Océan. Monaco No. **446** 1924 pp. 1–24.

105.—König, H. Zur Kenntnis des untern Trochitenkalkes im nördlichen Kraichgau. Sitz. Ber. Ak. Wiss. Heidelberg Abh. **13** 1920 pp. 3–48 1 pl.

106.—Konopacki, M. Über den Einfluss des verdünnten Seewassers auf verchiednene Entwicklungsstadien der Echinideneier. Bul. Intern. Acad. Kraków **1914 B** pp. 515–625.

107.—Labbé, A. Introduction à l'étude des milieux marins hyperalcalins. Arch. zool. Paris **62** 1924 pp. 401–568 pl. xvii.

108.—Lambert, J. Sur un echinide nouveau du Rhétien des Préalpes bernoises. Eclogae Geol. Helvet. Lausanne **18** 1924 pp. 448–450.

109.—Lambert, J. Nota sobre *Macropneustes cubensis*, Cottreau. Mem. Soc. Cuba Hist. Nat. Habana **6** 1924 pp. 43–52.

110.—Lambert, J. Note sur les échinides de la collection Ambayrac. Riviera Scient. Nice **2** No. 1 1924 pp. 3–8.

Landauer, W. *vide* Gumbel, E. J.

111.—Lehner, L. Die Gliederung der fränkischen albüberdeckenden Kreide. Centralbl. Min. Stuttgart **1924** pp. 176–181.

Leighly, J. B. *vide* Ehlers, G. M.

112.—Leuthardt, F. Die Fossilien des Burgeinschnittes bei Liestal. Eclogae Geol. Helvet. Lausanne **18** 1923 pp. 300–303.

113.—Lewinski, J. Monographie géologique et paléontologique du Bonnonien de la Pologne. Mém. soc. géol. Paris **24** 1923 pp. 5–56 pls. i–viii. [Echinoderma at p. 44.]

114.—Lillie, R. S. A simple case of salt antagonism in starfish eggs. J. Gen. Physiol. Baltimore **3** 1921 pp. 783–794.

115.—Lillie, R. S. and **Cattell, W.** The relation between the electrical conductivity of the external medium and the rate of cell division in sea urchin eggs. J. Gen. Physiol. Baltimore **5** 1923 pp. 807–814.

116.—Liouville, J. Sur quelques documents de la faune marine du Maroc nouvellement parvenus a l'institut scientifique. Bul. soc. sci. inst. Maroc Rabat **4** 1924 pp. 16–21.

117.—Loeb, R. F. Radioactivity and physiological action of potassium. J. Gen. Physiol. Baltimore **3** 1921 pp. 229–236.

118.—Lörenthey, I. Adatok északi Albánia Eocén képzödmenyének kifejlödéséhez és faunajához. Magyar Kir. Foldt. Budapest **25** 1917 pp. 1–21 pls. i–ii.

119.—Luna, J. La parthénogènese blastomérique chez l'oursin. C.R. soc. biol. Paris **91** 1924 pp. 822–823.

120.—MacArthur, J. W. An experimental study and a physiological interpretation of exogastrulation and related modifications in echinoderm embryos. Biol. Bull. Wood's Hole Mass. **46** 1924 pp. 60–87.

121.—M[acbride], E. W. Phylogeny as an Independent Science. Review of "Geschichte der Organismen," von Prof. Victor Franz. Nature **114** 1924 pp. 889–890.

122.—McLearn, F. H. Palaeontology of the Silurian rocks of Arisaig, Nova Scotia. Geol. Surv. Canada Ottawa **137** 1924 pp. 1–180 pls. i–xxx. [Echinoderma at p. 41.]

123.—Mavor, J. W. and **De Forest, D. M.** The relative susceptibility to X-rays of the eggs and sperm of *Arbacia*. Anat. Rec. Philadelphia **29** 1924 p. 88.

124.—May, R. M. The ophiurans of Monterey Bay. Proc. Cal. Acad. Sci. San Francisco **13** (No. 18) 1924 pp. 261–303.

125.—Meek, A. Echinodermata (1923). Rep. Dove Mar. Lab. Cullercoats N. S. **13** 1924 p. 110.

126.—Moore, A. R. Reversal of reaction by means of strychnine in planarians and starfish. J. Gen. Physiol. Baltimore **1** 1918 pp. 97–100.

127.—Moore, A. R. The action of strychnine and nicotine on the neuromuscular mechanism of *Asterias*. J. Gen. Physiol. Baltimore **2** 1920 pp. 201–204.

128.—Moore, A. R. Stereotropism as a function of neuromuscular organization. J. Gen. Physiol. Baltimore **2** 1920 pp. 309–324.

129.—Moore, A. R. Stereotropic orientation of the tube feet of starfish (*Asterias*) and its inhibition by light. J. Gen. Physiol. Baltimore **4** 1922 pp. 163–169.

130.—Morningstar, H. Catalogue of type fossils in the Geological Museum at the Ohio State University. Ohio J. Sci. Columbus **24** 1924 pp. 31–64.

131.—Mortensen, T. Pighude (Echinodermer). Danmarks Fauna København 1924 pp. 1–274.

132.—Mortensen, T. The Danish expedition to the Kei Islands, 1922. Videns. Medd. nat. For. Kjöbenhavn **76** 1923 pp. 25–99 pls. i–iii.

133.—Murray, J. and **Chumley, J.** The deep-sea deposits of the Atlantic Ocean. Trans. R. Soc. Edinburgh **54** 1924 pp. i–ix 1–252. [Echinoderma at p. 247.]

134.—Nasonov, N. V Collections zoologiques présentées au Musée zoologique de l'Academie par les expeditions "Tajmyr" et du "Vajgač" pendant les années 1910–1915. Bul. Acad. Sci. Russ. Petrograd **10** 1916 pp. 1493–1504. [Title in Russian.]

135.—Nomura, S. On the agglutinating substance of the egg of the starfish, *Asterina pectinifera*. Sci. Rep. Tohohu Imp. Univ. Sendai Ser. **4** (Biol.) **1** 1924 pp. 83–87.

136.—**Nuttall,** G. H. F. Symbiosis in animals and plants. Rep. Brit. Ass. London **91** 1924 pp. 197–214.

Oomen, H. A. P. C. *vide* Heyde, H. C. van der.

137.—**Oppenheim,** P. Ueber Alter und Fauna des Tertiar-horizontes der Niemtschitzer Schichten in Mähren. Berlin **1922** pp. 1–106 pls. i–vii. [*Non vidi.*]

138.—**Orton,** J. H. English enemies of the American slipper-limpet, *Crepidula fornicata.* Nature London **114** 1924 p. 312.

139.—**Palmer,** D. B. K. A fauna of the middle Eocene shales near Vacaville, California. Univ. Cal. Pub. Geol. Berkeley **14** 1923 No. 8 pp. 289–318 pls. lii–lvii. [Echinoidea at p. 306.]

140.—**Petersen,** C. G. J. The necessity for quantitative methods in the investigation of the animal life on the sea-bottom. Proc. Zool. Soc. London **1924** pp. 687–694.

141.—**Pilotti,** C. Sul Siluriano inferiore di Regione S. Marco (Iglesias). Boll. soc. geol. ital. Roma **53** 1924 32.

142.—**Plough,** H. H. Partial pluteus larvae from isolated blastomeres of the two-cell stage of the egg of *Arbacia.* Anat. Rec. Philadelphia **29** 1924 pp. 108–109.

143.—**Polowzow,** W. Über die Wirkung der Alkoholnarkose auf die Entwicklung der Seeigeleier. ii. Teil. Polysyncytien. Arch. mikr. Anat. Berlin **103** 1924 pp. 1–67.

144.—**Portes,** F. and **Benoit,** C. La réaction de Heffter et Arnold chez quelques animaux marins. Bul. soc. sci. med. biol. Montpellier **5** 1924 pp. 215–217.

145.—**Principi,** P. Arturo Issel. Boll. Soc. geol. ital. Roma **42** 1924 pp. xx–xxiv.

146.—**Reiss,** P. Sur les anomalies du développement de l'œuf d'oursin par l'action du goudron et leurs rapports avec les phénomènes cytologiques de la pathogénie du cancer. Arch. biol. Liège-Paris **34** 1924 pp. 345–368.

147.—**Reiss,** P. Remarques sur le P_H intérieur du noyau cellulaire et ses variations expérimentales. C.R. Acad. sci. Paris **179** 1924 pp. 641–643.

Reiss, P. *vide* Vlès, F. and Vellinger, E.

148.—**Rogers,** C. G. and **Cole,** K. S. Heat production by the echinoderm egg during fertilisation and early cleavage. Anat. Rec. Phjladelphia **29** 1924 p. 89.

149.—**Roig,** M. S. Revision de los equinidos fosiles cubanos. Mem. Soc. Cuba Hist. Nat. Habana **6** 1924 pp. 6–42 pls. i–xiv.

150.—**Roig,** M. S. Nuevas especies de equinidos fosiles cubanos. Mem. Soc. Cuba Hist. Nat. Habana **6** 1924 pp. 75–92 pls. viii–xiv.

151.—**Runnström,** J. Zur Kenntnis der Zustandsänderungen der Plasmakolloide bei der Reifung, Befruchtung und Teilung des Seeigeleies. Act. Zool. Stockholm **5** 1924 pp. 345–392.

152.—**Runnström,** J. Weitere Studien über die Veränderungen der Lipoide bei der Befruchtung des Seeigeleies. Ark. Zool. Stockholm **16** 1924 No. 27 pp. 1–6.

153.—**Runnström,** J. Plasmaveränderungen bei der Reifung und Befruchtung des Seeigeleies. Ark. Zool. Stockholm **16** 1924 No. 30 pp. 1–6.

154.—**Sacco,** F. Nuovi cenni di fossili cretacei negli argilloscisti dell' Appennino settentrionale. Atti Acc. sc. Torino **59** 1924 pp. 30–43.

155.—**Savage,** T. E. Richmond rocks of Iowa and Illinois. Amer. J. Sci. New Haven Conn. **8** 1924 pp. 411–427.

156.—**Schafarzik,** F. A *Hypsospatangus hantkeni,* Páv. sp. fajnak Budapesten a Budai Márgálan való újabb tömeges elöfordulásárol. Über ein neues Massenhaftes Vorkommen von *Hypsospatangus hantkeni* Pávay sp. im Ofener Mergel zu Budapest. Foldt. Kozl. Budapest **51-52** 1923 pp. 7–9 85–86. [German translation at p. 85.]

157.—**Schlosser,** M. Die Cenomanfauna der Bayrischen Alpen. Centralbl. Min. Stuttgart **1924** pp. 82–95.

158.—**Schmidt,** W. J. Über Regeneration bei Holothurienkalkkörpern (*Euphronides*). Zs. Morph. Ökol. Berlin **2** 1924 pp. 251–258.

159.—Schmidt, W. J. Entwicklungsmechanische Analyse abnormer Chiridotarädchen. Zs. Morph. Ökol. Berlin **2** 1924 pp. 611–642.

160.—Schneider, R. Verbreitung und Bedeutung des Eisens im animalischen Organismus (Im Besondern erforscht am Seetierleben des Golfes von Neapel). Arch. Natg. Berlin Abt. A. **90** pt. iv 1924 pp. 1–48. [Echinoderma at p. 13.]

161.—Sciacchitano, I. Sul guscio gelatinoso delle uova nei ricci di mare. Natura Milano **15** 1924 pp. 30–35.

Sciacchitano, I. *vide* Fadda, G.

162.—Seifriz, W. An elastic value of protoplasm, with further observations on the viscosity of protoplasm. Brit. Journ. Exper. Biol. Edinburgh **2** 1924 pp. 1–11.

163.—Sherborn, C. D. Index animalium sive index nominum quae ab. A.D. MDCCLVIII generibus et speciebus animalium imposita sunt. Part IV Index Bail.—Byzos **1924** pp. 641–943; Part V Index C.—Ceyl. **1924** pp. 945–1196.

164.—Slocom, A. W. and **Foerste, A. F.** New echinoderms from the Maquoketa Beds of Fayette County, Iowa. Ann. Rep. Iowa Geol. Surv. Des Moines **29** 1919 and 1920 for 1924 pp. 315–384 pls. xxix–xxxiv.

165.—Smith, H. W. and **Clowes, G. H. A.** The influence of carbon dioxide on the velocity of division of marine eggs. Amer. J. Physiol. Baltimore **68** 1924 pp. 183–202.

166.—Smith, H. W. and **Clowes, G. H. A.** The influence of hydrogen ion concentration on the development of normally fertilised *Arbacia* and *Asterias* eggs. Biol. Bull. Wood's Hole Mass. **47** 1924 pp. 322–332.

167.—Smith, H. W. and **Clowes, G. H. A.** The influence of hydrogen ion concentration on the fertilisation process in *Arbacia*, *Asterias* and *Chaetopterus* eggs. Biol. Bull. Wood's Hole Mass. **47** 1924 pp. 333–344.

168.—Springer, F. A remarkable fossil echinoderm fauna in the East Indies. Amer. J. Sci. New Haven Conn. **8** 1924 pp. 325–335.

169.—Springer, F. A tertiary crinoid from the West Indies. Proc. U. S. Nat. Mus. Washington **65** pp. 1–8 pl. i.

170.—Stefanini, G. Il retico nei dintorni di Selvena (Siena) e i suoi fossili. Bol. Soc. geol. ital. Roma **42** 1923 for 1924 pp. 48–57 pl. v.

171.—Stefanini, G. Fossili terziari della Cirenaica. Palaeontogr. Italica Pisa **27** 1921 [for 1924] pp. 101–146 [1–46] pls. xvi–xviii [i–iii]. [*See* Zool. Record vol. lx.]

Stewart, G. A. *vide* Branson, E. B.

172.—Stiles, C. W. The International Commission on Zoological Nomenclature. Science New York N.Y. **60** 1924 pp. 84–85.

Tansey, V. O. *vide* Branson, E. B.

173.—Taylor, C. V. and **Tennent, D. H.** Preliminary report on the development of egg fragments. Carnegie Inst. Year Book Washington (Tortugas Lab. Rep.) **23** 1924 pp. 201–206.

174.—Tennent, D. H. Specificity in fertilisation. Science New York N.Y. **60** 1924 pp. 162–164.

Tennent, D. H. *vide* Taylor, C. V.

175.—Thalmann, H. Die Fauna des Vindobonien vom Imihubel bei Niedermuhlern (Kt. Bern). Eclogae Geol. Helvet. Lausanne **18** 1923 pp. 366–371.

Thielmann, F. *vide* Holtz, F.

176.—Thomas, A. O. Echinoderms of the Iowa Devonian. Ann. Rep. Iowa Geol. Surv. Des Moines **29** 1919–1920 for 1924 pp. 385–552 pls. xxxv–liv.

177.—Thomas, A. O. The geographic distribution of Iowa Devonian echinoderms. Proc. Iowa Acad. Sci. Des Moines **30** 1923 pp. 463–465.

178.—Thomas, A. O. Some fossils from an outcrop in Des Moines. Proc. Iowa Acad. Sci. Des Moines **30** 1923 pp. 473–479 pls. i–ii. [Echinoderma at p. 472.]

179.—Twenhofel, W. H. The geology and invertebrate paleontology of the Comanchean and "Dakata" formations of Kansas. Bul. State Geol. Surv. Kansas Topeka **9** 1924 pp. 1–135 pls. **vii–xxiii.** [Echinoderma at p. 52.]

180.—Valette, A. Note sur deux espèces de "*Conocrinus*" de l'etage bartonien des environs de Vence. Riviera Scient. Nice **2** 1924 pp. 25–32.

181.—Vardabasso, S. Uno sguardo alla stratigrafia del Terziario dell' Istria a proposito di un nuovo livello fossilifero. Atti Acc. ven.-trent. Padova **14** 1924 pp. 27–45.

Vellinger, E. *vide* Vlès, F. and Reiss, P.

182.—Vlès, F., Reiss, P. and **Vellinger,** E. Recherches potentiométriques sur le P_H intérieur de l'œuf d'oursin. Bul. Inst. Océan. Monaco No. **450** 1924 pp. 1–14.

183.—Vlès, F., Reiss, P. and **Vellinger,** E. Mesures potentiométriques sur le P_H de la substance des œufs d'oursin. C.R. Acad. sci. Paris **179** 1924 pp. 349–351.

184.—Vogl, V. Nouvelles notices sur les echinides éocènes de la Hongrie. Földt. Közl. Budapest **50** 1920 p. 123.

185.—Vogl, V. Adatok Magyarország mezozoikus tüskebörünek ismeretéhez. Notes sur les échinides mésozoiques de la Hongrie. Földt. Közl. Budapest **51-52** 1923 pp. 76–77 115–116. [French resumé at p. 115.]

186.—Vredenburg, E. Oligocene Echinoidea collected by Rao Bahadur S. Sethu Rama Rau in Burma. Rec. Geol. Surv. Calcutta **54** 1923 pp. 412–415 pl. xxx.

187.—Wagner, R. Neue Beobachtungen aus dem Muschelkalk und Rōt von Jena. Jahrb. geol. Landesanst. Berlin **42** 1922 pp. 1–16.

188.—Wallerius, I. D. Skalgrusområdet vid Linneviken jämte några andra skalförekomster på nordvåstra Tjörn. Geol. För. Förh. Stockholm **46** 1924 pp. 225–247.

189.—Walton, A. Studies on the physiology of reproductions. i.—The flocculation of sperm suspensions in relation to surface charge. Brit. Journ. Exper. Biol. Edinburgh **2** 1924 pp. 13–20.

190.—Wanner, J. Die Permischen Blastoiden von Timor. Jaarb. Mijnw. Ned. Ost. Ind. Weltefreden **1922** 1 pp. 163–236 pls. i–v.

191.—Wells, H. New species of *Cucumaria* from Monterey Bay, California. Ann. Mag. Nat. Hist. London Ser. 9 **13** pp. 113–121.

192.—Wilson, H. V. Amoeboid behaviour of the lymph cells in sea-urchins. J. Elisha Mitchell Sci. Soc. **40** 1924 pp. 169–170.

193.—Winckworth, [R.]. Specimens of molluscs and other animals associated with them found in a day's digging at Salcomb. . . Proc. Malac. Soc. London **16** 1924 p. 1.

194.—Withers, T. H. The occurrence of the Crinoid *Uintacrinus* in Australia. J. R. Soc. West. Austral. Perth **11** 1924 pp. 15–18 pl. iii.

195.—Wright, J. A "*Woodocrinus*" fauna from the Scottish border. Geol. Mag. London **61** 1924 pp. 270–279 pls. xiii–xvi.

196.—Wrigley, A. Faunal divisions of the London Clay illustrated by some exposures near London. Proc. Geol. Ass. London **35** 1924 pp. 245–259.

197.—Yanichevsky, M. Les schistes argileux près de la ville de Tomsk. Mem. Com. Géol. Petrograd **107** 1915 pp. 1–96 pls. i–viii. [In Russian with French resumé at p. 89.] [Echinoderma at p. 33.]

198.—Zirpolo, G. Contributo allo studio della rigenerazione del dermascheletro negli Echinidi. Boll. soc. nat. Napoli **32** 1920 pp. 47–50.

199.—Zirpolo, G. Notizia riguardante altri esemplari anomali di *Asterina gibbosa* Penn. pescati nel Golfo di Napoli. Boll. soc. nat. Napoli **32** 1920 pp. 63–70.

200.—Zirpolo, G. Su di un *Astropecten aurantiacus* L. con tre piastre madreporiche. Boll. soc. nat. Napoli **32** 1920 pp. 71–76.

201.—Zirpolo, G. Ricerche sulla rigenerazione delle braccia di *Asterina gibbosa* Penn. Boll. soc. nat. Napoli **33** 1922 pp. 53–54.

202.—Zirpolo, G. Notizia di un *Asterias glacialis* O. F. Muller con sei braccia pescata nel Golfo di Napoli. Boll. soc. nat. Napoli **34** 1923 pp. 160–162.

203.—Zirpolo, G. Sull' omeofagismo dell' *Asterina gibbosa* Penn. Boll. soc. nat. Napoli **34** 1923 pp. 166–168.

II.—SUBJECT INDEX.

N.B.—*The number in Clarendon Type quoted after the author's name, in the Subject and Systematic Indices, refers to "Titles," where a fuller reference will be found.*

GENERAL.

Historical.—Gislén, **75**; Mortensen, **132**; Springer, **168**.

General Treatises and Monographs.—Crinoidea: Clark, **31**; Clark, **32**; Echinoderm fauna of S. Africa: Clark, **33**; Fourtau, **69**; Gislén, **75**; Pighude (Echinodermer): Mortensen, **131**; Roig, **149**; Index animalium: Sherborn, **163**; Blastoidea of Timor: Wanner, **190**.

Bibliography.—Bather, **6**; B[ather], **7**; Fossa-Mancini, **68**; M[acBride], **121**.

Biography.—Arturo Issel: Principi, **145**.

Museums.—Lambert, **110**; Type fossils in Geol. Mus., Ohio State Univ.: Morningstar, **130**; Nasonov, **134**; Valette, **180**.

Technique.—Cachotin, **17**; Dakin & Fordham, **45**; Dalcq, **47** & **49**; Duval, **56**; Glaser, **76**; Kindred, **102**; Koehler, **103**; Nomura, **135**; Runnström, **152**; Seifriz, **162**; Smith & Clowes, **166** & **167**; Tennent, **174**; Vlès, Reiss & Vellinger, **182** & **183**.

Classification and Nomenclature.—[Anon.], **3**; Bather, **8**; Clark, **32**; Gislén, **74** & **75**; Crinoidea: Goldring, **79**; Slocum & Foerste, **164**; Stiles, **172**.

Local Lists.—Corroy, **37** & **38**;—Rockall Bank: Dollfus, **53**; Wright, **195**.

Chemical Constituents.—Duval, **56**; Holtz & Thielmann, **93**.

STRUCTURE.

General Accounts. — Crinoidea: Clark, **31**; Crinoidea: Goldring, **79**; Mortensen, **131**; Blastoidea: Wanner, **190**.

Symmetries.—Drzewina & Bohn, **55**; Fisher, **66**; Gumbel & Landauer, **84**; Koehler, **103**.

Skeletal Tissue or Stereom.—Becher, **9**; Kindred, **102**.

Skeletal Anatomy.—Bather, **8**; Becher, **9**; Gislén, **75**.

Hydrocoel, Respiratory Organs.—Gislén, **75**; Kindred, **102**.

Digestive System, Cuverian Organs.—Bonnet, **10**; Gislén, **75**; Irving, **97**; Kindred, **102**.

Axial Organ.—Fedotov, **65**.

PHYSIOLOGY.

Circulation.—Duval, **56**; Heyde, van der, **91**; Kindred, **102**.

Respiration.—Gislén, **75**; Irving, **97**; Kindred, **102**; Schneider, **160**.

Alimentation.—Bonnet, **10**; Gislén, **75**; Heyde, van der, **91**; Irving, **97**; Kindred, **101**.

Sensation.—Crozier, **42**; Moore, **126**, **127**, **128** & **129**; Portes & Benoit, **144**.

Experimental.—Crinoidea: Clark, **31**; Courrier, **40** & **41**; Crozier, **42**; Dakin & Fordham, **45**; Dalcq, **48** & **49**; Duval, **56**; Ephrussi, **60**; Glaser, **76**; Mechanism of cell division: Gray, **81**; Heilbrunn, **88**; Kindred, **102**; Parthenogenesis in sea-urchin: Luna, **119**; Production of typical lithium larvae: MacArthur, **120**; Moore, **126**, **127**, **128** & **129**; Portes & Benoit, **144**; Reiss, **147**; Runnström, **151**, **152** & **153**; Elastic value of protoplasm: Seifriz, **162**; Smith & Clowes, **166** & **167**; Tennent, **174**; Vlès, Reiss & Vellinger, **183**; Flocculation of sperm suspensions in relation to surface charge: Walton, **189**.

DEVELOPMENT.

General Accounts. — Crinoidea: Clark, **31**; Koehler, **103**; Mortensen, **131**.

Formation of Gonads.—Drzewina & Bohn, **55**; Elmhirst, **59**.

Oviposition, Fertilization, Segmentation.—Boschma, **12**; Carter, **19, 20** & **21**; Chambers, **23**; Formation of aster in artificial parthenogenesis: Chambers, **24**; Chambers, **25**; Mechanism of entrance of sperm into starfish egg: Chambers, **26**; Courrier, **40** & **41**; Dakin & Fordham, **45**; Dalcq, **46, 47a, 48** & **49**; Elmhirst, **59**; Ephrussi, **60, 61** & **62**; Fadda & Sciacchitano, **63**; Fox, **70**; Glaser, **76**; Godlewski, **77** & **78**; Mechanism of cell division: Gray, **81**; Surface tension theory of membrane elevation: Heilbrunn, **88**; Konopacki, **106**; Labbe, **107**; Lillie, **114**; Lillie & Cattell, **115**; Loeb, **117**; Parthenogenesis in sea-urchin: Luna, **119**; Production of typical lithium larvae: MacArthur, **120**; Mavor & De Forest, **123**; Nomura, **135**; Plough, **142**; Polowzów, **143**; Reiss, **146** & **147**; Rogers & Cole, **148**; Runnström, **151**; **152** & **153**; Sciacchitano, **161**; Elastic value of protoplasm: Seifriz, **162**; Smith & Clowes, **165, 166** & **167**; Taylor & Tennent, **173**; Tennent, **174**; Vlès, Reiss & Vellinger, **182** & **183**.

Larval Stages.—Barrois, **4**; Driesch, **54**; Drzewina & Bohn, **55**; Elmhirst, **59**; Fedotov, **64**; Gislén, **75**; Godlewski, **77**; Gumbel & Landauer, **84**; Mavor & De Forest, **123**; Plough, **142**; *Chiridota*: Schmidt, **159**.

Organogeny.—Gislén, **75**; *Chiridota*: Schmidt, **159**.

Post Larval Growth Stages.—Elmhirst, **59**; Fisher, **66**; Gislén, **75**; *Chiridota*: Schmidt, **159**.

Parthenogenesis.—Carter, **19, 20** & **21**; Dalcq, **46**; Tennent, **174**.

Experimental Embryology.—Carter, **19, 20** & **21**; Chambers, **23**; Formation of aster in artificial parthenogenesis: Chambers, **24**; Chambers, **25**; Mechanism of sperm into starfish egg: Chambers, **26**; Courrier, **40** & **41**; Dakin & Fordham, **45**; Dalcq, **46, 47, 47a, 48** & **49**; Ephrussi, **60, 61** & **62**; Glaser, **76**; Godlewski, **78**; Heilbrunn, **88**; Lillie, **114**; Lillie & Cattell, **115**; Loeb, **117**; Parthenogenesis in sea urchin: Luna, **119**; Production of typical lithium larvae: MacArthur, **120**; Mavor & De Forest, **123**; Nomura, **135**; Plough, **142**; Polowzów, **143**; Reiss, **146** & **147**; Rogers & Cole, **148**; Runnström, **151, 152** & **153**; Elastic value of protoplasm: Seifriz, **162**; Smith & Clowes, **165, 166** & **167**; Taylor & Tennent, **173**; Tennent **174**; Vlès, Reiss & Vellinger, **182** & **183**; Wilson, **192**.

ETHOLOGY.

Special Habits.—Crinoidea: Clark, **31**; Gislén, **75**.

Habitat.—Crinoidea: Clark, **31** & **32**; Gislén, **75**; Crinoidea: Goldring, **79**; Liouville, **116**; Mortensen, **132**.

Feeding.—Crinoidea: Clark, **31**; Gislén, **75**; Irving, **97**; Orton, **138**; Zirpolo, **203**.

Locomotion.—Bather, **8**; Crinoidea: Clark, **31**.

Autotomy and Regeneration.—Crinoidea: Clark, **31**; Elmhirst, **59**; Fisher, **66**; Koehler, **103**; *Euphronides*: Schmidt, **158**; Zirpolo, **198** & **201**.

Parasites and Commensals.—Crinoidea: Clark, **31**; Hentschel, **89**; Koehler, **103**; Mortensen, **132**; Nuttall, **136**; Winckworth, **193**.

Protection of Young.—Gislén, **75**.

Sexual Dimorphism. — Crinoidea: Clark, **31**; Fisher, **66**.

Geological Aspect.—Gislén, **75**; Springer, **168**.

Phenology.—Springer, **168**.

Breeding Habits.—Elmhirst, **59**; Fox, **70**.

Hybridization.—Crinoidea: Clark, **31**.

Hermaphrodism.—Drzewina & Bohn **55**.

VARIATION AND ÆTIOLOGY.

Variation in Form.—Clark, **32**; Drzewina & Bohn, **55**; Koehler & Bonnet, **104**; Blastoidea: Wanner, **190**.

Variation in Colour.—Ophiuroidea: BURFIELD, **16**; Crinoidea: CLARK, **31**.

Variation Tetratological.—CHADWICK, **22**; GISLÉN, **75**; *Chiridoto*: SCHMIDT, **159**; Blastoidea: WANNER, **190**; ZIRPOLO, **199**, **200** & **202**.

Variation Mutational.—CLARK, **32**; DRZEWINA & BOHN, **55**.

Evolution.—BARROIS, **4**; ELLES, **58**; GISLÉN, **75**.

Phylogeny.—FRANZ, **71**; GISLÉN, **75**; Crinoidea: GOLDRING, **79**; GROBBEN, **83**; M[ACBRIDE], **121**; SPRINGER, **168**.

DISTRIBUTION.

GEOGRAPHICAL.

Atlantic Ocean, etc.—BORLEY, **11**; BUEN, DE, **15**; CLARK, **32**; S. Africa: CLARK, **33**; Holothurioidea: CLARK, **34**; Rockall Bank: DOLLFUS, **53**; GARCIAS I FONT, **72**; GISLÉN, **74**; KOEHLER, **103**; LIOUVILLE, **116**; MEEK, **125**; Danish Seas: MORTENSEN, **131**; Echinoderm remains in deep-sea deposits: MURRAY & CHUMLEY, **133**; PETERSEN, **140**; List of littoral crinoids: SPRINGER, **169**.

Indian Ocean, etc.—Ophiuroidea: BURFIELD, **16**; S. Africa: CLARK, **33**; DÖDERLEIN, **52**.

Pacific Ocean, etc.—Holothurioidea: CLARK, **34**; British Columbia, Holothurians: CLARK, **35**; FISHER, **66** & **67**; GOLDSCHMIDT, **80**; Ophiurans of Monterey Bay, California: MAY, **124**; NASONOV, **134**; WELLS, **191**.

Arctic Ocean, etc.—DERJUGIN, **50**; GISLÉN, **74**.

Antarctic Ocean, etc.—KOEHLER, **103**.

Malaysia.—Holothurioidea: CLARK, **34**; MORTENSEN, **132**.

GEOLOGICAL.

CAINOZOIC.

General.—ALEMAGNA, **2**; BASSOLI, **5**; DIETRICH, **51**.

Pleistocene.—JORDAN, **100**; WALLERIUS, **188**.

Pliocene.—BOSWELL, **13**; CURRIE, **43**; ROIG, **149**.

Miocene.—CHECCHIA-RISPOLI, **27**; DAGUIN, **44**; GISLÉN, **75**; LAMBERT, **109**; OPPENHEIM, **137**; ROIG, **149** & **150**; *Balanocrinus*: SPRINGER, **169**; THALMANN, **175**.

Oligocene.—ISRAELSKY, **98**; OPPENHEIM, **137**; ROIG, **49**; SCHAFARZIK, **156**; VREDENBURG, **186**.

Eocene.—ABRARD, **1**; CHECCHIA-RISPOLI, **29**; Echinoidea from Jamaica: HAWKINS, **86**; Antarctic: IHERING, VON, **94**; INNOCENTI, DEGLI, **95** & **96**; LAMBERT, **110**; LÖRENTHEY, **118**; PALMER, **139**; ROIG, **149**; SPRINGER, **169**; VALETTE, **180**; VARDABASSO, **181**; VOGL, **184**; WRIGLEY, **196**.

Cretaceous.—BATHER, **8**; CHECCHIA-RISPOLI, **28** & **30**; CORNET, **36**; CORROY, **38**; Madagascar: COTTREAU, **39**; DIETRICH, **51**; GASTER, **73**; GISLÉN, **75**; GREGORY, **82**; HALLEZ, **85**; Echinoidea from Jamaica: HAWKINS, **86**; HEWITT, **90**; Antarctic: IHERING, VON, **94**; LAMBERT, **110**; LEHNER, **111**; ROIG, **149**; SACCO, **154**; SCHLOSSER, **157**; TWENHOFEL, **179**; WITHERS, **194**.

Jurassic.—FOURTAU, **69**; GISLÉN, **75**; JEKELIUS, **99**; LEUTHARDT, **112**; LEWINSKI, **113**; VOGL, **185**.

Lias (and Rhaetic).—CANNON, **18**; CORROY, **37**; LAMBERT, **108**; Italy: STEFANINI, **170**; VOGL, **185**.

Triassic.—HILDEBRAND, **92**; KÖNIG, **105**; WAGNER, **187**.

Permian.—GISLÉN, **75**; SPRINGER, **168**; Blastoidea of Timor: WANNER, **190**.

Permo-Carboniferous. — HAYASAKA, **87**.

Carboniferous. — SPRINGER, **168**; THOMAS, **178**; WRIGHT, **195**; YANICHEVSKY, **197**.

Devonian.—BRANSON, **14**; Crinoidea, GOLDRING, **79**; EHLERS & LEIGHLY, **57**; SPRINGER, **168**; THOMAS, **176**; Iowa spp., distribution of: THOMAS, **177**.

Silurian.—MCLEARN, **122**; PILOTTI, **141**.

Ordovician.—SAVAGE, **155**; SLOCUM & FOERSTE, **164**.

III.—SYSTEMATIC INDEX.

General.

Asteroidea, Barrois **4**.—*A.*, Fedotov, **65**.

Blastoidea, Springer **168**.

Crinoidea, Springer **168**.

Echinodermata, Mortensen **132**.

Echinoidea, Barrois **4**.—E., Fedotov, **65**.

Holothurioidea, Barrois **4**.

Ophiuroidea, Barrois **4**.

Holothurioidea.

Actinopyga, Clark, H. L. **33** p. 426.

Anapta, Clark, H. L. **34** pp. 499–501 pl. xii figs. 7 8.

Bathyplotes, Mortensen **131** p. 220.

Benthodytes sanguineolenta, Clark H. L. **33** p. 420.

Cucumaria fisheri & form *astigmata*, *cosmotyrsitus*, *tenuicoriata* **spp. n.** & **form. n.** California, Wells Ann. Mag. Nat. Hist. **13** pp. 113–121.—*C.* with *C. lissoplaca*, *trachyplaca* **spp. n.** British Columbia, Clark, H. L. Canad. Field. Nat. **38** pp. 54–57.—*C.* with *C. spyridophora* **sp. n.** S. Africa, Clark, H. L. Ann. S. Afric. Mus. **13** pp. 410–414.—*C.*, Kindred **102**.—*C.*, Mortensen **131** p. 227.

Chiridota, Schmidt **159**.

Echinocucumis typica, Clerk, H. L. **33** p. 418.—*E.*, Mortensen **131** p. 232.

Enapta, Clark, H. L. **34** p. 462 pl. i figs. 1–7.

Euphronides, Schmidt **158**.

Holothuria with *H. grammata* **sp. n.** S. Africa, Clark, H. L. Ann. S. Afric. Mus. **13** pp. 421–425.—*H. captiva*, Crozier **42**.—*H.*, [Anon.] **3**.—*H.*, Dollfus **53**.—*H.* Linn 1767, Stiles **172**.

Holothurioidea, Gislén **75** p. 243.

Labidoplax, Clark, H. L. **34** pp. 492–495 pls. iv fig. 10; viii figs. 8–14; ix figs. 6–10; x figs. 1–6; xi fig. 8.—*L.*, Mortensen **131** p. 252.

Leptosynapta with *L. circopatina* Jamaica; *crassipatina*, Florida; *ictinodes*, Victoria Australia; *multigranula*, Florida; *multipora*, Jamaica; *parvipatina*, Tobago **spp. n.** Clark, H. L. Bul. Mus. Comp. Zool. Cambridge Mass. **65** pp. 477–492 pls. iv figs. 6–9; vi figs. 1–16; vii figs. 1–28; viii figs. 3–7; ix figs. 1–5; xi figs. 1–5.—*L.*, Clark, H. L. **35**.—*L.*, Mortensen **131** p. 247.

Mesothuria, Mortensen **131** p. 218.

Myriotrochus, Mortensen **131** p. 255.

Opheodesma, Clark, H. L. **34** p. 465 pl. ii figs. 1–9.

Pentacta, Clark, H. L. **33** p. 416.

Photankyra with *P. bipedata* **sp. n.** Off Flores, Clark, H. L. Bul. Mus. Comp. Zool. Cambridge Mass. **65** pp. 496–499 pls. viii figs. 1–2; ix fig. 11; x fig. 7; xi figs. 6–7; xii figs. 1–6.

Phyllophorus frauenfeldi, Clark, H.L. **33** p. 417.—*P.*, Mortensen **131** p. 237.

Physalia, [Anon.] **3**.—*P.* Lk. 1801. Stiles **172**.

Planktothuria diaphana, Clark, H. L. **33** p. 420.

Polyplectena, Clark, H. L. **34** p. 468 pl. i figs. 8–12.

Pseudocucumis africana, Clark, H. L. **33** p. 417.

Psolus with *P. imperfectus* **sp. n.** S. Africa, Clark, H. L. Ann. S. Afric. Mus. **13** pp. 418–419.—*P.*, Clark, H. L. **35**.—*P.*, Mortensen **131** p. 239.

Stichopus chloronotus, Clark, H. L. **33** p. 425.—*S.*, Dollfus **53**.—*S.*, Kindred **102**.—*S.*, Mortensen **131** p. 222.—*S.*, Schneider **160**.

Synapta, Clark, H. L. **34** p. 471 pls. iii figs. 1 2; iv fig. 1; v.—*S.*, Schneider **160**.—*S. inhaerens*, Winckworth **193**.

Synaptula, Clark, H. L. **34** p. 473 pls. i fig. 13; iii figs. 3–9; iv figs. 2–5.

Thyone, Clark, H. L. **33** p. 415.—*T.*, Dollfus **53**.—*T.*, Mortensen **131** p. 233.

Echinoidea.

†*Acrosalenia*, Fourtau **69** pp. 12–14 pl. i figs. 4 5.

†*Agassizia regia* **sp. n.** Oligocene Mexico, Israelsky Proc. Cal. Acad. Sci. **13** p. 142.

†*Amblypygus*, Bassoli **5**.—*A.*, Hawkins **86** p. 321.

†*Anorthopygus*, CHECCHIA-RISPOLI **30** p. 13.—*A.*, LAMBERT **110.**

†*Antillaster*, ROIG **149** p. 35.

†*Arachnioplеurus istrianus* **sp. n.** Eocene Istria, DEGLI INNOCENTI Riv. ital. paleont. Perugia **30** pp. 43–44 pl. ii figs. 7–10.

Arbacia aequituberculata, BONNET **10.**—*A. punctulata*, MACARTHUR **120.**—*A. p.*, MAVOR & DE FOREST **123.**—*A. p.*, ROGERS & COLE **148.**—*A. p.*, SMITH & CLOWES **165.**—*A. p.*, WILSON **192.**—*A. pustulosa*, HOLTZ & THIELMANN **93.**—*A.*, KINDRED **101.**—*A.*, PLOUGH **142.**—*A.*, SMITH & CLOWES **166** & **167.**

†*Archeocidaris*, THOMAS **178.**

†*Archiacia*, CHECCHIA-RISPOLI **30** p. 26 pl. ix figs. 12 13.

Aspidodiadema nicobaricum, CLARK, H. L. **33** p. 371.

†*Asterostoma*, ROIG **149** p. 33.

Astriclypeus, TENNENT **174.**

Astropyga radiata, CLARK, H. L. **33** p. 373.

†*Bothriopygus rudistarum*, HAWKINS **86** pp. 315 316.—*B.*, COTTREAU **39** p. 12.

†*Bothryopneustes*, FOURTAU **69** pp. 27–30 pls. ii fig. 5; v. figs. 9–13.

†*Breynia* with *B. australasiae* var. *aroensis* **var. n.** Pliocene Aru Isds., CURRIE Geol. Mag. **61** pp. 63–66 pl. iv.—*B. birmanica* **sp. n.** Oliogocene Burma, VREDENBURG Rec. Geol. Surv. India **54** p. 413 pl. xxx fig. 1.

Brisaster fragilis, CLARK, H. L. **33** p. 399.

†*Brissoides*, ROIG **149** & **150.**

†*Brissopatagus*, ISRAELSKY **98** p. 142.

Brissopsis lyrifera, CLARK, H. L. **33** p. 401.—*B.*, MORTENSEN **131** p. 206.

†*Brissopsis fermori* **sp. n.** Oligocene Burma, VREDENBURG Rec. Geol. Surv. India **54** p. 413 pl. xxx fig. 2.

†*Brissus*, HAWKINS **86** p. 322.—*B.*, ROIG **149** p. 39.

†*Cardiaster*, LAMBERT **110.**—*C.*, ROIG **149** p. 36.

†*Cassidulus*, CHECCHIA-RISPOLI **28** p. 89 pl. iii figs. 1–2.—*C.*, CHECCHIA-RISPOLI **30** p. 16 figs. 1, 4.

Centrechinus setosus, CLARK, H. L. **33** p. 372.

Cidaris, MORTENSEN **131** p. 172.

†*Cidaris isnardi* [**sp. n.**] Bartonian France, LAMBERT Riv. Scient. Nice **2** No. 1 p. 7.—*C.*, CHECCHIA-RISPOLI **29** p. 73 & **30.**—*C.*, CORNET **36.**—*C.*, COTTREAU **39** p. 8.—*C.*, CURRIE **43.**—*C.*, FOURTAU **69** p. 1 pl. iii fig. 18.—*C.*, HEWITT **90.**—*C.*, IHERING, VON **94** p. 266.—*C.*, ISRAELSKY **98** p. 138.—*C.*, LEWINSKI **113** p. 44.—*C.*, ROIG **149** p. 20.

Clypeaster, CLARK, H. L. **33** p. 392.

†*Clypeaster millosevichi, tariccoi*, **spp. n.**, Miocene Sardinia, CHECCHIA-RISPOLI Boll. R. Uff. geol. Ital. Roma. 49 pp. 2–7 pl.—*C.* with *C. pileus, sanrafaelensis*, **spp. n.**, Oligocene Mexico, ISRAELSKY Proc. Cal. Acad. Sci. **13** pp. 138–140 pls. ii figs. 1, 1a, 2; iii fig. 2.—*C.*, BASSOLI **5.**—*C.*, LAMBERT **110.**—*C.*, ROIG **149** p. 23.

† *Codiopsis*, ROIG **149** p. 21.

Coelopleurus interruptus, CLARK, H. L., **33** p. 379 pl. xxi fig. 3.

Coenopedina capensis **sp. n.** S. Africa, CLARK, H. L. Ann. S. Afric. Mus. **13** p. 375 pl. xxi figs. 1, 2.

†*Collyrites*, FOURTAU **69** p. 31.—*C.*, LAMBERT **110.**—*C.*, *ovalis*, VOGL **185.**

†*Conulus*, ROIG **149** p. 22.

†*Corthya*, LAMBERT **110.**

†*Cottaldia*, GREGORY **82.**

†*Cyphosoma*, ROIG **149** p. 21.

Dermatodiadema indicum, MORTENSEN **132.**

†*Devonocidaris* with *D. jacksoni* **sp. n.** Devon Iowa, THOMAS Iowa geol. Surv. **29** pp. 500–505 pls. l fig. 36; li figs. 1–26; lii figs. 1–4; liii figs. 1–7; liv figs. 1–6.

†*Diplocidaris*, FOURTAU **69** p. 11 pls. i fig. 3; iii figs. 1–3; iv figs. 8–12.

†*Discoidea*, ROIG **149** p. 23.

†*Discoïdes*, LAMBERT **110.**

Dorocidaris, BECHER **9.**—*D.*, DOLLFUS **53.**—*D.*, SCHNEIDER **160.**

†*Dorocidaris*, LAMBERT **110.**

†*Echinanthus*, ROIG **149** p. 30.

Echinarachnius parma, MacArthur **120**.—*E. p.*, Seifriz **162**.—*E. p.*, Kindred **102**.

Echinaster seposita, Garcias i Font **72**.

†*Echinobrissus*, Checchia-Rispoli **30** p. 23 pls. viii figs. 10–23, 25–27; ix fig 4.

Echinocardium cordatum, Meek **125**. —*E. c.*, Winckworth **193**.—*E. pennatifidum* Norman, Gislén **74**.—*E.*, Clark, H. L. **33** p. 405.—*E.*, Elmhirst **59**.—*E.*, Dollfus **53**.—*E.*, Mortensen **131** p. 201.—*E.*, Schneider **160**.

†*Echinocorys ovatus*, Hallez **85**.—*E.*, Hewitt **90**.

Echinocyamus, Elmhirst **59**.—*E.*, Mortensen **131** p. 190.—*E. elegans*, Clark, H. L. **33** p. 393.

†*Echinocyamus suffolciensis*, Boswell **13**.

Echinodiscus, Clark, H. L. **33** pp. 394–395.

†*Echinodiscus*, Currie **43**.

Echinoidea, Gislén **75** p. 245.

Echinolampas crassa, Clark, H. L. **33** pp. 397–398.

†*Echinolampas*, Bassoli **5**.—*E.*, Checchia-Rispoli **29** p. 73 pl. vii figs. 1, 1a, 2, 2a.—*E.*, Hawkins **86** pp. 318–319.—*E.*, Lambert **110**.—*E.*, Roig **149** p. 30.

Echinometra mathaei, Clark, H. L. **33** p. 390.—*E.*, Koehler & Bonnet **104** p. 3.

†*Echinometra*, Roig **149** p. 22.

†*Echinoneus*, Roig **149** p. 29.

†*Echinopedina cubensis*, Hawkins **86** p. 318.—*E.*, Roig **149** p. 21.

Echinosoma petersii, Clark, H. L. **33** p. 375.

Echinostrephus molare, Clark, H. L. **33** p. 387.

Echinothrix calamaris, Clark, H. L. **33** p. 373.

Echinus accutus, Bonnet **10**.—*E. esculentus*, Chadwick **22**.—*E. e.*, Dakin & Fordham **45**.—*E. e.*, Gray **81**.—*E. melo*, Garcias i Font **72**.—*E.*, Becher **9**.—*E.*, Clark, H. L. **33** p. 384.—*E.*, Dollfus **53**.—*E.*, Elmhirst **59**.—*E.*, Hentschel **89**.—*E.*, Koehler & Bonnet **104** p. 16.—*E.*, Mortensen **131** p. 181.—*E.*, Schneider **160**.—*E.*, Walton **189**.

Encope, Jordan **100**.

†*Encope*, Roig **149** p. 28.

†*Epiaster*, Cornet **36**.—*E.*, Gregory **82**.

Eucidaris metularia, Clark, H. L. **33** p. 370.

†*Eupatagus*, Hawkins **86** p. 322.

†*Gitolampopsis* sec. n. *Gitolampas* type *G. lamberti* Ch. Risp.; *Gitolampas zuffardii* [? sp. n.] Cretaceous Tripoli, Checchia-Rispoli Mem. serv. Descr. Cart. geol. Ital. **8** p. 18 pls. vii figs 5–24; ix fig. 3.—*G.*, Checchia-Rispoli **30** p. 17.

†*Globator*, Checchia-Rispoli **30** p. 15 pls. viii figs. 1–2; ix figs. 1–2.

†*Goniocidaris*, Currie **43**.

†*Goniopygus supremus* sp. n. Cretaceous Jamaica, Hawkins Geol. Mag. **61** p. 313 pl. xviii figs. 1, 2.—*G.*, Checchia-Rispoli **30** p. 12 pl. viii figs. 8–9.

†*Gymnocidaris*, Fourtau **69** pp. 18–20 pl. i figs. 8, 11.

†*Habanaster*, Roig **149** p. 13.

†*Hebertia simplex* sp. n. Eocene Jamaica, Hawkins Geol. Mag. **61** p. 317 pl. xviii figs. 4, 5.

Heliocidaris, Tennent **174**.

†*Hemiaster*, Checchia-Rispoli **28** p. 91 and **30** p. 27 pls. viii figs 3–7, 24; ix figs. 14, 18.—*H.*, Cottreau **39** p. 10. —*H.*, Hawkins **86** p. 316 pl. xviii fig. 3. —*H.*, Roig **149** p. 36.

†*Hemicidaris*, Fourtau **69** p. 17 pl. iii figs. 8, 9.—*H.*, Jekelius **99**.—*H.*, Vogl **185**.

†*Hemipneustes*, Checchia-Rispoli **30** p. 30 pl. ix figs. 8–11.

†*Heteraster*, Lambert **110**.

Heterocentrotus, Becher **9**.—*H.*, Koehler & Bonnet **104** p. 12.

†*Heterodiadema*, Checchia-Rispoli **30** p. 6 pl. ix fig. 5.

†*Heterosalenia occidentalis*, Hawkins **86** pp. 315–316.

†*Holaster*, CORNET **36**.—*H.*, GREGORY **82**.—*H.*, HEWITT **90**.

†*Holectypus*, CHECCHIA-RISPOLI **28** p. 87 pl. iv figs. 2–2c & **30** p. 14.—*H.*, FOURTAU **69** pp. 24–25.—*H.*, VOGL **185**.

†*Hypospatangus hantkeni*, SCHFARZIK **156**.

Laganum decagonale, CLARK, H. L. **33** p. 393.

Lamprechinus, CLARK, H. L. **33** p. 383.

†*Lanieria*, ROIG **149** p. 23.

†*Linthia trechmanni* **sp. n.** Eocene Jamaica, HAWKINS Geol. Mag. **61** p. 319 pl. xviii figs. 6, 7.—*L.* CHECCHIA-RISPOLI **28** p. 91 pl. iv figs. 1–1b & **30** p. 27.—*L.*, IHERING, VON **94** p. 266.

Lovenia elongata, CLARK, H. L. **33** p. 404.

†*Lovenia*, ISRAELSKY **98** p. 145.

Lytechinus (*Toxopneustes*) *variegatus*, TAYLOR & TENNENT **173**.

†*Macropneustes dubius* **sp. n.** Oligocene Mexico, ISRAELSKY Proc. Cal. Acad. Sci. **13** p. 143 pl. iii fig. 1.—*M. cubensis*, LAMBERT **109**.—*M.*, ROIG **149** p. 38.

†*Mauritanaster*, ROIG **149** p. 38.

Metalia spatagus, CLARK, H. L. **33** p. 402.

†*Micraster*, COTTREAU **39** p. 9.—*M.*, HEWITT **90**.—*M.*, LAMBERT **110**.

†*Nortonechinus* with *N. welleri* & var. *latus*, *N. owenensis*, *stainbrooki*, **spp.** & **var. n.** Devon Iowa, THOMAS Iowa Geol. Surv. **29** pp. 483–496 pls. xlvii figs. 1–7; xlviii figs. 1–49; xlix figs. 1–6, 8–43.

†*Nucleopygus geayi* **sp. n.** Cretaceous Madagascar, COTTREAU Ann. paléont. Paris **11** p. 121.

Orechinus, CLARK, H. L. **33** p. 383.

†*Paleopneustes elevatus* **sp. n.** Oligocene Mexico, ISRAELSKY p. 144. pl. iv figs. 1a, 1b.

Paracentrotus with *P. grandis* **sp. n.** S. Africa, CLARK, H. L. Ann. S. Africa. Mus. **13** p. 388 pl. xxii.—*P. lividus*, BONNET **10**.—*P. l.*, COURRIER **40** & **41**.—*P. l.* EPHRUSSI **60** & **61**.—*P. l.*, FADDA & SCIACCHITANO **63**.—*P. l.*, SCIACCHITANO **161**.—*P. l.*, VLÈS, REISS & VELLINGER **182** & **183**.—*P.*, KOEHLER & BONNET **104** p. 19.

†*Paracidaris jeanneti* **sp. n.** Rhaetian Switzerland, LAMBERT Eclog. geol. Helvet. **18** pp. 448–450 figs.

†*Paraster*, HAWKINS **86** p. 322.

Parechinus angulosus, CLARK, H. L. **33** p. 385.—*P. microtuberculatus*, SCIACCHITANO **161**.

†*Periaster tampicoensis* **sp. n.** Oligocene Mexico, ISRAELSKY Proc. Cal. Acad. Sci. **13** p. 140.—*P.*, HAWKINS **86** p. 319.

†*Pericosmus*, LAMBERT **110**.

Phormosoma placenta, CLARK, H. L. **33** p. 374.

†*Plagiobrissus*, HAWKINS **86** p. 321.—*P.*, ISRAELSKY **98** p. 144.

†*Plegiocidaris*, FOURTAU **69** pp. 2–5 pls. i figs. 1–2; iii figs. 4–5, 10–16; v figs. 1–8.—*P.*, VOGL **185**.

†*Polycyphus*, FOURTAU **69** p. 23 pl. ii fig. 3.

†*Poraster*, COTTREAU **39** p. 9.

†*Porocidaris*, LAMBERT **110**.

Pourtalesia alcocki, CLARK, H. L. **33** p. 399.

Prionocidaris baculosa, CLARK, H. L. **33** p. 370.

Psammechinus, DOLLFUS **53**.—P., MORTENSEN **131** p. 179.—*P.*, RUNNSTRÖM **151** & **153**.

†*Pseudoasterostoma*, ROIG **149** p. 34.

†*Pseudocidaris*, FOURTAU **69** pp. 15–16 pls. i figs. 6–7, 9–10; v. figs. 14–16.

†*Pseudodiadema silbinense* **sp. n.** Rhaetic Italy, STEFANINI Bol. Soc. geol. ital. **42** p. 51 pl. v figs 1a–g, 2a–c.

†*Pseudosalenia*, FOURTAU **69** p. 15 pl. iv fig. 13.

†*Pyguropsis*, FOURTAU **69** p. 27 pl. ii fig. 6.

†*Pygurus*, FOURTAU **69** p. 26 pl. iii fig. 17.

†*Rachiosoma*, CHECCHIA-RISPOLI **30** p. 11 pl. ix fig. 16.

†*Rhabdocidaris mespilum* [sp. n ?] Oligocene or Micoene, OPPENHEIM Ueber Alter und Fauna des Tertiarhorizontes der Niemtschitzer Schichten in Mähren. Berlin **1922** pp. 1–106 pls. i–vi.—*R.*, FOURTAU **69** pp. 5–10 pls. iii figs. 6–7; iv figs. 1–7, 14–23; v figs. 20, 22.—*R.*, CHECCHIA-RISPOLI **29** p. 72.

†*Rhyncopygus*, HAWKINS **86** p. 319.

Salenia phoinissa, CLARK, H. L., **33** p. 378.

†*Salenia kansasense* **sp. n.** Cretaceous Kansas, TWENHOFEL Bul. State geol. Surv. Kansas **9** p. 52 pl. vii fig. 7.—*S.*, CHECCHIA-RISPOLI **30** p. 9 pl. ix fig. 15.—*S.* GREGORY **82**.—*S.*, ROIG **149** p. 21.

Salmacis bicolor, CLARK, H. L. **33** p. 383.

†*Sanchezaster*, ROIG **149** p. 15.

Schizaster edwardsi, CLARK, H. L. **33** p. 400.

†*Schizaster dumblei* **sp. n.** Oligocene Mexico, ISRAELSKY Proc. Cal. Acad. Sci. **13** p. 141.—*S.*, BASSOLI **5**.—*S.*, HAWKINS **86** p. 321.—*S.*, LÖRENTHEY **118**.—*S.*, ROIG **149** p. 37.

†*Scutellina*, BASSOLI **5**.

†*Scutella*, ISRAELSKY **98** p. 140.

Spatagobrissus **gen. n.** with *S. mirabilis* **sp. n.** S. Africa, CLARK, H. L. Ann. S. Afric. Mus. **13** p. 402 pl. xxiii.

Spatangus capensis, CLARK, H. L. **33** p. 404.—*S.*, DOLLFUS **53**.—*S.*, ELMHIRST **59**.—*S.*, MORTENSEN **131** p. 198.

Sphaerechinus granularis, BONNET **10**.—*S. g.*, CARTER **19 20** & **21**.—*S. g.*, GUMBEL & LANDAUER **84**.—*S. g.*, ZIRPOLO **198**.—*S.*, BECHER **9**.—*S.*, KOEHLER & BONNET **104** p. 23.—*S.*, SCHNEIDER **160**.

Stereocidaris capensis, CLARK, H. L. **33** p. 371.

†*Stereocidaris de Stefanii* **sp. n.** Eocene Istria, DEGLI INNOCENTI Riv. ital. paleont. Perugia **30** pp. 41–42 pl. ii figs. 1–6.

†*Stomechinus*, FOURTAU **69** pp. 20–23 pl. ii figs. 1–2.

Stomopneustes variolaris, CLARK, H. L. **33** p. 378.

Strongylocentrotus franciscianа, MACARTHUR **120**.—*S., lividus*, DRZEWINA & BOHN **55**.—*S. l.*, FOX **70**.—*S. l.*, GUMBEL & LANDAUER **84**.—*S. l.*, LUNA **119**.—*S. l.*, SCIACCHITANO **161**.—*S.*, KINDRED **102**.—*S.*, MORTENSEN **131** p. 187.—*S.*, POLOWZÓW **143**.

Temnopleurus toreumaticus, CLARK, H. L. **33**.—*T.*, TENNENT **174**.

†*Tetragramma*, CHECCHIA-RISPOLI **30** p. 8 pl. ix fig. 17.

†*Thylechinus sethuramae* **sp. n.** Oligocene Burma, VREDENBURG Rec. geol. Surv. India **54** p. 414 pl. xxx fig. 3.

†*Toxocidaris*, LAMBERT **110**.

Toxopneustes pileolus, CLARK, H. L. **33** p. 386.—*T., variegatus*, WILSON **192**.

†*Triplacidia hungarica* **sp. n.** Eocene Hungary, VOGL Földt. Közl. Budapest **50** p. 128.

Tripneustes gratilla, CLARK, H. L. **33** p. 387.

Tropholampas loveni, CLARK, H. L. **33** p. 395.

Urechinus naresianus, CLARK, H. L. **33** p. 398.

†*Victoriaster*, ROIG **149** p. 17.

†*Xenocidaris americana* **sp. n.** Devon. Iowa, THOMAS Iowa geol. Surv. **29** pp. 496–499 pl. l figs. 1–25.

†*Zuffardia*, CHECCHIA-RISPOLI **28** p. 88 & **30** p. 21 pl. ix figs. 6–7.

ASTEROIDEA.

Acanthaster, FISHER **66**.

Anseropoda with *A. habracantha* **sp. n.** S. Africa, CLARK, H. L. Ann. S. Afric. Mus. **13** p. 287 pl. xvii figs. 4, 5.—*A.*, KOEHLER **103** p. 134.

Anthenoides, DÖDERLEIN **52**.

Archaster typicus, BOSCHMA **12**.

Asteracanthion, SCHNEIDER **160**.

Asterias (*Smilasterias*) *terwieli* **sp. n.** Chile, GOLDSCHMIDT Ann. Mag. Nat. Hist. **13** pp. 499–502.—*A., capensis*, CLARK, H. L. **33** p. 306.—*A., forbesi*, CHAMBERS **25**.—*A. f.*, LILLIE **114**.—*A. f.*, MOORE **126**.—*A. f.*, SMITH & CLOWES **165**.—*A. glacialis*, DALCQ **46**, **48** & **49**.—*A. g.*, ZIRPOLO **202**.—*A. rubens*, DUVAL **56**.—*A. r.*, HEYDE, VAN

DEE, **91**.—*A. r.*, ORTON **138**.—*A.*, ELMHIRST **59**.—*A.*, FISHER **66**.—*A.*, KOEHLER **103** p. 97.—*A.*, MOORE **127**, **128** & **129**.—*A.*, MORTENSEN **131** p. 76.—*A.*, SCHNEIDER **160**.—*A.*, SMITH & CLOWES **166** & **167**.

Asterina with *A. granifera* var. *sporacantha*, *A. dyscrita*, *gracilispina*, **spp.** & **var. n.** S. Africa, CLARK, H. L. Ann. S. Afric. Mus. **13** pp. 281–287 pls. xvi figs. 3–6; xvii figs. 1, 2.—*A. gibbosa*, ZIRPOLO **199**, **201** & **203**.—*A. pectinifera*, NOMURA **135**.—*A.*, KOEHLER **103** p. 130.—*A.*, SCHNEIDER **160**.

Asteroidea, GISLÉN **75**. p. 259.

Astroceramus, DÖDERLEIN **52**.

Astropecten aurantiacus and *A. irregularis*, LIOUVILLE **116**.—*A. a.*, PORTES & BENOIT **144**.—*A. a.*, ZIRPOLO **200**.—*A.*, CLARK, H. L. **33** pp. 249–251.—*A.*, DOLLFUS **53**.—*A.*, ELMHIRST **59**.—*A.*, KOEHLER **103** p. 187.—*A.*, MORTENSEN **131** p. 36.—*A.*, SCHNEIDER 160.

†*Astropecten*, IHERING, VON **94** p. **266**.

Austrofromia schultzei, CLARK, H. L. **33** p. 276.

Bathybiaster robustus, CLARK, H. L. **33** p. 247.

Brisinga cricophora, CLARK, H. L. **33** p. 309.—*B.*, KOEHLER **103** p. 91.—*B.*, MORTENSEN **131** p. 85.

Brisingella, MORTENSEN **131** p. 86.

Calliaster with *C. acanthodes* **sp. n.** S. Africa, CLARK, H. L. Ann. S. Afric. Mus. **13** pp. 264–266 pl. xii figs. 3, 4.—*C.*, DÖDERLEIN **52**.

Ceramaster chondriscus, *trispinosus*, *patagonicus* var. *euryplax*, **spp.** & **var. n.** S. Africa, CLARK, H. L. Ann. S. Afric. Mus. **13** pp. 258–264 pl. xiv figs. 1–6.—*C.*, KOEHLER **103** p. 173.—*C.*, MORTENSEN **131** p. 48.

Chaetaster, KOEHLER **103** p. 140.

Chondraster elattosus **sp. n.** S. Africa, CLARK, H. L. Ann. S. Afric. Mus. **13** p. 274 pl. viii fig. 4.

Cladaster macrobrachius **sp. n.** S. Africa, CLARK, H. L. Ann. S. Afric. Mus. **13** p. 268 pl. xiii figs. 1, 2.

Coronaster volsellatus, CLARK, H. L. **33** p. 306.

Coscinasterias calamaria, CLARK, H. L. **33** p. 306.—*C.*, FISHER **66**.—*C.*, KOEHLER **103** p. 103.

Cribrella, DOLLFUS **53**.

Crossaster penicellatus, CLARK H. L. **33** p. 295.

Cryaster brachyactis **sp. n.** S. Africa, CLARK, H. L. Ann. S. Afric. Mus. **13** p. 293 pl. xi figs. 1, 2.

Ctenasterias, KOEHLER **103** p. 110.

Ctenodiscus, KOEHLER **103** p. 212.

Culcita, CLARK, H. L. **33** pp. 273–274.

Culcitopsis, KOEHLER **103** p. 160.

Dermaster, KINDRED **102**.

Diplopteraster multipes, CLARK, H. L. **33** p. 300.—*D.*, KOEHLER **103** p. 171.—*D.*, MORTENSEN **131** p. 72.

Dipsacaster sladeni, CLARK, H. L. **33** p. 246.

Distolasterias, FISHER **66**.

Echinaster reticulatus **sp. n.** S. Africa, CLARK, H. L. Ann. S. Afric. Mus. **13** p. 290 pl. xv figs. 1, 2.—*E. sepositus*, HEYDE, VAN DER, **91**.—*E.*, KOEHLER **103** p. 125.—*E.*, SCHNEIDER **160**.

Eustolasterias Fisher, FISHER **66**.

Evasterias, KINDRED **102**.

Gigantaster **gen. n.** *G. weberi* **sp. n.** DÖDERLEIN Siboga-Exp. Leiden **98** Mon. 46[2] pp. 65–69.

Hacelia, KOEHLER **103**. p. 164.

Henricia ornata, CLARK, H. L. **33** p. 289.—*H.*, DOLLFUS **53**.—*H.*, ELMHIRST **59**.—*H.*, KINDRED **102**.—*H.*, KOEHLER **103** p. 126.—*H.*, MORTENSEN 131 p. 61.

Hippasterias phrygiana, CLARK, H. L. **33** p. 270.—*H.*, DOLLFUS **53**.—*H.*, KOEHLER **103** p. 178.—*H.*, MORTENSEN **131** p. 52.

Hydrasterias, FISHER **66**.—KOEHLER **103** p. 106.

Hymenaster with *H. lamprus*, *gennaeus*, **spp. n.**, S. Africa, CLARK, H. L. Ann. S. Afric. Mus. **13** pp. 300–303 pls. x; xi figs. 3, 4.—*H.*, KOEHLER **103** p. 169.

Iconaster, DÖDERLEIN **52**.

Korethraster, KOEHLER **103** p. 150.

Leptasterias, KINDRED **102**.—*L.*, KOEHLER **103** p. 107.

Leptoptychaster, KOEHLER **103** p. 203.

Leptychaster kerguelenensis, CLARK, H. L. **33** p. 242.—*L.*, MORTENSEN **131** p. 40.

Linckia, CLARK, H.L. **33** pp. 276–277.

Lithosoma with *L. pentaphyllum brevipes* **subsp. n.** Indian Ocean, DÖDERLEIN Siboga-Exp. Leiden **98** Mon. 46² p. 58 pls. xv figs. 2, 3, 3a; xvi figs. 3, 3a, 4, 4a.

Lophaster quadrispinus **sp. n.** Cape Town, CLARK, H. L. Ann. S. Afric. Mus. **13** p. 295 pl. xviii figs. 1, 2.—*L.*, KOEHLER **103** p. 148.—*L.*, MORTENSEN **131** p. 68.

Ludiaster hirsutus, CLARK, H. L. **33** p. 241.

Luidia, CLARK, H. L. **33** p. 252.—*L.*, DOLLFUS **53**.—*L.*, ELMHIRST **59**.—*L.*, KOEHLER **103** p. 207.—*L.*, MORTENSEN **131** p. 41.

Lysastrosoma [**gen. n.** ?] *type L. anthosticta* [**sp. n.** ?] Japan, FISHER Proc. U. S. Nat. Mus. **64** No. 2493 pp. 1–6 pl. i–ii.

Lytaster, FISHER **66**.

Magdalenaster, KOEHLER **103** p. 128.

Marginaster, KOEHLER **103** p. 161.

Marthasterias, CLARK, H. L. **33** pp. 305–306.—*M.*, KOEHLER **103** p. 95.

Mediaster capensis **sp. n.** S. Africa, CLARK, H. L., Ann. S. Afric. Mus. **13** p. 256 pl. xvi figs. 1, 2.—*M.*, DÖDERLEIN **52**.

†*Mesopalaeaster*, MCLEARN **122** p. 41 pl. iii figs. 1, 2.

Nanaster, KOEHLER **103** p. 115.

Naroda variolata, CLARK, H. L. **33** p. 276.

Nymphaster, DÖDERLEIN **52**.

Odontaster, KOEHLER **103** p. 183.

Ophidiaster, KOEHLER **103** p. 163.

Oreaster, CLARK, H. L. **33** p. 273.—*O.*, SCHNEIDER **160**.

Orthasterias, FISHER **66**.

Palmipes, ELMHIRST **59**.—*P.*, SCHNEIDER **160**.

Paragonaster, DÖDERLEIN **52**.

Parasterina bellula, CLARK, H. L. **33** p. 280.

Patiria miniata, IRVING **97**.

Pectinaster filholi, CLARK, H. L. **33** p. 240.

Pedicellaster, KOEHLER **103** p. 121.—*P.*, MORTENSEN **131** p. 73.

Peltaster, MORTENSEN **131** p. 50.

Perissasterias **gen. n.** with *P. polycantha* **sp. n.** S. Africa, CLARK, H. L. Ann. S. Afric. Mus. **13** p. 307 pl. xviii fig. 3.

Pisaster ochraceus, IRVING **97**.—*P.*, KINDRED **102**.

Plutonaster with *P. proteus*, **sp. n.** S. Africa, CLARK, H. L. Ann. S. Afric. Mus. **13** pp. 242–246 pl. xiii figs. 3–7.—*P.*, DOLLFUS **53**.—*P.*, KOEHLER **103** p. 201.

Porania, ELMHIRST **59**.—*P.*, KOEHLER **103** p. 152.—*P.*, MORTENSEN **131** p. 56.

Poraniomorpha, KOEHLER **103** p. 157.—*P.*, MORTENSEN **131** p. 55.

Poraniopsis capensis **sp. n.** S. Africa, CLARK, H. L. Ann. S. Afric. Mus. **13** p. 289 pl. xv figs. 3, 4.

Pontaster, DOLLFUS **53**.—*P.*, KOEHLER **103** p. 185.—*P.*, MORTENSEN **131** p. 48.

Porcellanaster caeruleus, CLARK, H. L. **33** p. 239.

Progoniaster **gen. n.** *P. atavus* **sp. n.**, DÖDERLEIN Siboga Exp. Leiden **98** Mon. 46² pp. 61–62 pl. xvii figs. 2, 3a–c.

Pseudarchaster with *P. brachyactis* **sp. n.** S. Africa, CLARK, H. L. Ann. S. Afric. Mus. **13** pp. 253–256 pl. xii figs. 1, 2.—*P.*, DÖDERLEIN **52**.—*P.*, DOLLFUS **53**.—*P.*, KOEHLER **103** p. 180.—*P.*, MORTENSEN **131** p. 51.

Psilaster acuminatus, CLARK, H. L. **33** p. 248.—*P.*, KOEHLER **103** p. 204.—*P.*, MORTENSEN **131** p. 38.

Pteraster capensis and *affinis*, CLARK, H. L. **33** pp. 298–300 pl. xi figs. 3, 4.—*P.*, KOEHLER **103** p. 166.—*P.*, MORTENSEN **131** p. 69.

Pycnopodia, KINDRED **102**.

Retaster cribrosus, Clark H. L. **33** p. 298.

Rosaster, Döderlein **52**.

Scelasterias Perrier 1889=*Eustolasterias* Fisher 1923 : *S. heteropaes* **sp. n.** California, Fisher Bul. Inst. Océan. Monaco No. **444** pp. 2, 7.—*S.*, Koehler **103** p. 104.

Sibogaster **gen. n.** *S. digitatus* **sp. n.** Döderlein Siboga-Exp. Leiden **98** Mon. 46[2] pp. 63–64 pls. xviii figs. 3, 3a ; xix figs. 3, 3a–c.

Solaster, Elmhirst **59**.—*S.*, Kindred **102**.—*S.*, Koehler **103** p. 143.—*S.*, Mortensen **131** p. 64.

Stephanasterias, Fisher **66**.

Stichaster felipes, Clark, H. L. **33** p. 304.—*S.*, Dollfus **53**.—*S.*, Elmhirst **59**.

Stichastrella, Dollfus **53**.—*S.*, Koehler **103** p. 117.—*S.*, Mortensen **131** p. 74.

Stolasterias Fisher **66**.

Stylasterias, Fisher **66**.—*S.*, Koehler **103** p. 105.

Tethyaster, Koehler **103** p. 199.

Tosia tuberculata, Clark, H. L. **33** p. 266 pl. ix figs. 1, 2.

†*Urasterella*, McLearn **122** p. 42.

Urasterias, Koehler **103** p. 112.

Ophiuroidea.

Amphilepis, Koehler **103** p. 303.—*A.*, Mortensen **131** p. 135.

Amphilimna, May **124** pp. 281–282.

Amphiocnida, Mortensen **131** p. 131.

Amphiodia microplax **sp. n.** Red Sea Burfield Ann. Mag. Nat. Hist. **13** p. 146.—*A.*, May **124** pp. 285–288.

Amphiopholis, Burfield **16** p. 146.—*A.*, Clark H. L. **33** pp. 329, 330.—*A.*, Koehler **103** p. 288.—*A.*, May **124** pp. 289–290.—*A.*, Mortensen **131** p. 133.

Amphioplus, Burfield **16**.—p. 149.—*A.*, Clark, H. L. **33** pp. 330–332.

Amphiura, Clark, H. L. **33** pp. 326-329.—*A.*, Elmhirst **59**.—*A.*, Koehler **103** p. 281.—*A.*, May **124** pp. 282–284.—*A.*, Mortensen **131** p. 124.—*A.*, Schneider **160**.

Asteronyx loveni, Clark, H. L. **33** p. 314.—*A.*, Koehler **103** p. 226.—*A.*, May **124** p. 269.—*A.*, Mortensen **131**. p. 151.

Asteroporpa, Clark, A. H., **31** p. 641.

Asteroschema, Fedotov **65** p. 248.—*A.*, May **124** pp. 267–268.

Astroboa, Burfield **16** p. 146.

Astrocladus euryale, Clark, H. L. **33** p. 319.—*A.*, Fedotov **65** p. 287.

Astrogomphus, Clark, A. H. **31** p. 641.

Astrospartus, Koehler **103** p. 234.

Astrophiura cavellae, Clark, H. L. **33** p. 354.

Astrothamnus papillatus **sp. n.** S. Africa, Clark, H. L. Ann. S. Afric. Mus. **13** p. 316 pl. xx figs. 5, 6.

Cryptopelta aster, Clark, H. L. **33** p. 350.—*C.*, Koehler **103** p. 335.

Dictenophiura **gen. n.** with *D. anoidea* **sp. n.** S. Africa, Clark, H. L. Ann. S. Afric. Mus. **13** p. 361 pl. xix figs. 1, 2.

Gorgonocephalus chilensis, Clark, H. L. **33** p. 318.—*G.*, Fedotov **64** & **65** p. 237.—*G.*, Koehler **103** p. 230.—*G.*, May **124** pp. 270–271.—*G.*, Mortensen **131** p. 153.

†*Opheolepis* [*Ophiolepis*] *damesii*, Cannon **18**.

Ophiacantha nerthepsila **sp. n.** S. Africa Clark, H. L. Ann. S. Afric. Mus. **13** p. 319 pl. xix figs. 3, 4.—? *O.*, Burfield **16** p. 146.—*O.*, Fedotov **65** p. 266.—*O.*, Koehler **103** p. 243.—*O.*, May **124** pp. 272–274.—*O.*, Mortensen **131** p. 112.

Ophiactis, Burfield **16** p. 146.—*O.*, Clark, A. H. **31** p. 642.—*O.*, Clark, H. L. **33** pp. 332–335 pl. xx figs. 3, 4.—*O.*, Dollfus **53**.—*O.*, Koehler **103** p. 291.—*O.*, Mortensen **131** p. 116.

Ophiarachnella capensis, Clark, H. L. **33** p. 351.

Ophiernus, Clark, H. L. **33** p. 365.

Ophioaethiops, Clark, A. H. **31** p. 644.

Ophiobyrsella, Mortensen **131** p. 104.

Ophiocentrus, Koehler **103** p. 298.

Ophiochiton australis **sp. n.** S. Africa, CLARK, H. L. Ann. S. Afric. Mus. **13** p. 345 pl. xx figs. 1, 2.

Ophiocnemis marmorata, CLARK, H. L. **33** p. 341.

Ophiocnida brachiata, WINCKWORTH **193.**

Ophiocoma, BURFIELD **16** p. 152.—*O.*, CLARK, A. H. **31** p. 622.—*O.*, CLARK, H. L. **33** pp. 348–349.—*O.*, ELMHIRST **59.**

Ophiocomina, KOEHLER **103** p. 338.—*O.*, MORTENSEN **131** p. 108.

Ophiconis, KOEHLER **103** p. 334.

Ophiocten, with *O. culveri* **sp. n.** California MAY Proc. Cal. Acad. Sci. **13** (No. 18) pp. 294–297.—*O.*, CLARK, H. L. **33** pp. 363–364.—*O.*, FEDOTOV **65** p. 273.—*O.*, KOEHLER **103** p. 322.—*O.*, MORTENSEN **131** p. 148.

Ophioderma, CLARK, H. L. **33** pp. 351–353.—*O.*, KOEHLER **103** p. 332.—*O.*, SCHNEIDER **160.**

†*Ophioderma squammosum*, KÖNIG **105.**

Ophioglypha, DOLLFUS **53.**—*O.*, SCHNEIDER **160.**

†*Ophioglypha*, WRIGLEY **196.**

Ophiolebes, CLARK, A. H. **31** p. 642.

Ophiolepis, BURFIELD **16** p. 154.

Ophiomastix venosa, CLARK, H. L. **33** p. 349.—*O.*, BURFIELD **16** p. 153.

Ophiomaza, BURFIELD **16** p. 152.—*O.*, CLARK, A. H. **31** p. 643.

Ophiomisidium pulchellum, CLARK, H. L. **33** p. 356.

Ophiomitrella corynephora **sp. n.** S. Africa CLARK, H. L. Ann. S. Afric. Mus. **13** p. 322 pl. xix figs 5, 6.—*O.*, MORTENSEN **131** p. 110.

Ophiomusium, CLARK, A. H. **31** p. 644, —*O.*, CLARK, H. L. **33** p. 364.—*O.*, KOEHLER **103** p. 329.

Ophiomyxa vivipara, CLARK, H. L. **33** p. 313.—*O.*, KOEHLER **103** p. 236.

Ophionereis, BURFIELD **16** p. 152.—*O.*, CLARK, H. L. **33** pp. 343–344.—*O.*, MAY **124** pp. 298–300.

Ophiopholis, CLARK, A. H. **31** p. 643 —*O.*, DOLLFUS **53.**—*O.*, ELMHIRST **59.**—*O.*, FEDOTOV **65** p. 259.—*O.*, KINDRED 102.—*O.*, KOEHLER **103** p. 301.—*O.*, MAY **124** pp. 277–281.—*O.*, MORTENSEN **131** p. 119.

Ophiopleura, KOEHLER **103** p. 327.

Ophioplocus, CLARK, H. L., **33** p. 365. —*O.*, MAY **124** pp. 297–298.

Ophiopteris, MAY **124** pp. 300–302.

Ophiopsammium nudum **sp. n.** S. Africa, CLARK, H. L. Ann. S. Afric. Mus. **13** p. 341.

Ophiopsila pantherina Koehler **var. n.** *occidentalis* Red Sea, BURFIELD Ann. Mag. Nat. Hist. **13** p. 153.—*O.*, KOEHLER **103** p. 342.

Ophiopus, KOEHLER **103** p. 300.—*O.*, MORTENSEN **131** p. 122.

Ophioscolex dentatus, CLARK, H. L. **33** p. 314.—*O.*, FEDOTOV **65** p. 275.—*O.*, KOEHLER **103** p. 239.—*O.*, MORTENSEN **131** p. 101.

Ophiosphaera, CLARK, A. H. **31** p. 644.

Ophiothamnus remotus, CLARK, H. L. **33** p. 324.

Ophiothela dividua, CLARK, H. L. **33** p. 343.

Ophiothrix, BURFIELD **16** p. 150.—*O.*, CLARK, H. L. **33** pp. 336–341.—*O.*, DOLLFUS **53.**—*O.*, ELMHIRST **59.**—*O.*, FEDOTOV **65** p. 270.—*O.*, KOEHLER **103** p. 253.—*O.*, MAY **124** pp. 274–276.—*O.*, MORTENSEN **131** p. 104.—*O.*, SCHNEIDER **160.**

Ophiura, CLARK, H. L. **33** pp. 357–361.—*O.*, DOLLFUS **53.**—*O.*, ELMHIRST **59.**—*O.*, FEDOTOV **65** p. 254.—*O.*, KOEHLER **103** p. 306.—*O.*, MAY **124** pp. 290–294.—*O.*, MORTENSEN **131** p. 137.—*O.*, SCHNEIDER **160.**

†*Ophiura*, GISLÉN **75** p. 108.

Ophiuroidea, GISLÉN **75** p. 251.

Ophiuropsis lymani, CLARK, H. L. **33** p. 315.

Paramphiura, KOEHLER **103** p. 290.

Pectinura, KOEHLER **103** p. 336.

Sigsbeia, FEDOTOV **65** p. 278.

Stegophiura, KOEHLER **103** p. 319.

CRINOIDEA.

Adelometra, CLARK, H. A. **32** p. 42.

†*Acacocrinus pentadactylus* (Grabau), GOLDRING **79** p. 200 pl. xxvi fig. 1.

†*Acanthocrinus* with *A. onondaga* **sp. n.** Devon. New York State, GOLDING Mem. N. York State Mus. **16** pp. 92–96 pl. ii figs. 7–12.

†*Actinometra*, GISLÉN **75** p. 116.

Aglaometra, CLARK, A. H. **31** pp. 258, 721.

†*Alsopocrinus* **gen. n.** Poteriocrinidae with *A. anna* **sp. n.** Devon. Missouri, TANSEY in BRANSON Missouri Bur. Geol. Mines **1922** p. 181 pl. xliv figs. 4–6.

Amphimetra, CLARK, A. H. **31** pp. 29, 241, 371 and 715.

†*Amphorometra* **gen. n.** with *A. brydonei, conoidea* Goldf. varr. *laevior, granulata* **sp.** & **varr. n.** Upper Cretaceous, GISLÉN Zool. Bidr. Uppsala **9** pp. **159**–162.

Analcidometra, CLARK, A. H. **23** p. 39.

†Anamesocrinidae **fam. n.**, GOLDRING Mem. N. York State Mus. Albany **79** p. 323.

†*Anamesocrinus* **gen. n.** with *A. lutheri* **sp. n.** Devon N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 323–326 pl. xl figs. 6–9.

†*Ancyrocrinus* with *A. quinquepartitus* **sp. n.** Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 456–458 pl. lix figs. 14–16.

Andrometra, CLARK, A. H. **31** p. 265.

Annacrinus, CLARK, A. H. **32** p. 44.

Annametra, CLARK, A. H. **31** p. 723 & **32** p. 41.

Antedon (*bifida*) *rosacea*, MEEK **125**.—*A.*, CLARK, A. H. **31** pp. 51, 264, 348, 351, 371–373, 499–509, 524–527, 722–723 & **32** pp. 5, 41.—*A.*, DOLLFUS **53**.—*A.*, ELMHIRST **59**.—*A.*, MORTENSEN **131** p. 23.—*A.*, SCHNEIDER **160**.

†*Antedon*, GISLÉN **75** pp. 109, 112, 113, 114, 115, 116.

Anthometra, CLARK, A. H. **31** pp. 270, 297, 557.

†*Aorocrinus* with *A. armatus, formosus longidactylus*, **spp. n.**, Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 248–265 pl. xxxv figs. 1–12.

†*Apiocrinites*, GISLÉN **75** p. 186.

†*Apiocrinus*, FOURTAU **69** p. 31.

†*Arachnocrinus*, GOLDRING **79** pp. 353–358 pls. xlv figs. 4–6; xlvi figs. 2–6; xlvii figs. 1, 2.

†*Archaeocrinus obconicus* **sp. n.** Ordovician Iowa, SLOCOM & FOERSTE Iowa geol. Surv. **29** p. 328 pl. xxix figs. 10–13.

†*Archaeometra* **gen. n.** with *A. carpenteri* **sp. n.** Jura. Bavaria, GISLÉN Zool. Bidr. Uppsala **9** pp. 156–158.

†*Arthracantha* with *A. granosa, splendens*, **spp. n.**, Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 279–304 pls. xxxvii figs. 1–16; lx figs. 1–3.—*A., mamelonifera* **sp. n.** Devon. Iowa, THOMAS Iowa Geol. Surv. **29** p. 463 pl. xlii figs. 14–18.

†*Aspidocrinus* with *A. onondagensis* **sp. n.** Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 442–445 pl. lix figs. 6–10, 12–13.

†*Asteriacites*, GISLÉN **75** p. 111.

†*Asterites*, GISLÉN **75** p. 111.

Asterometra, CLARK, A. H. **31** pp. 44, 251, 721.

†*Atactocrinus* ? *columnalis* **sp. n.** Ordovician Iowa, SLOCOM & FOERSTE Iowa Geol. Surv. **29** p. 343 pl. xxx figs. 20–31.

Atelecrinus, CLARK, A. H. **31** p. 277 & **32** p. 48.

†*Balanocrinus haitiensis* **sp. n.** Miocene Haiti, SPRINGER Proc. U. S. Nat. Mus. **65** pp. 1–8 pl. i.

Balanometra, CLARK, A. H. **31** p. 724.

Bathycrinidae, GISLÉN **75** p. 25.

Bathycrinus, CLARK, A. H. **31** p. 727 & **32** p. 45.

†*Botryocrinus* with *B. concinnus, obconicus, sentosus*, **spp. n.**, Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 363–374 pls. xli fig. 10; xlvii figs. 3–13.

†*Bourgueticrinus*, GISLÉN **75** p. 186.

†*Brachiocrinus nodosarius* Hall, GOLDRING **79** p. 332 pl. xli figs. 1–4.

†*Burdigalocrinus* with *B. crassus, remesi*, **spp. n.**, Upper Jura. Moravia and Czecho-Slovakia, GISLÉN Zool. Bidr. Uppsala **9** pp. 188–190.

Bythocrinus, CLARK, A. H. **31** p. 299 & **32** p. 45.—*B., chuni*, CLARK, H. L. **33** p. 229.

Calamocrinus, CLARK, A. H. **31** p. 727.

Calometra, CLARK, A. H. **31** pp. 249, 721.

Calyptrometra, CLARK, A. H. **31** pp. 260, 371, 722.

Capillaster, CLARK, A. H. **31** pp. 8, 231, 297, 704.

†*Carabocrinus* with *C. slocomi* & var. *costatus* **sp.** & **var. n.** Ordovician Iowa, FOERSTE in SLOCUM & FOERSTE Iowa Geol. Surv. **29** pp. 345–353 pls. xxxi figs. 1–10; xxxii figs. 1, 7–9, 12–14, 26–29, 19 ?, 20 ?.

†*Catactocrinus* **gen. n.** with *C. leptodactylus* **sp. n.** Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 405–408 pl. liii figs. 5–9.

Catoptometra, CLARK, A. H. **31** pp. 21, 238, 297, 371, 714.

Cenocrinus, CLARK, A. H. **32** p. 44.

Cenometra, CLARK, A. H. **31** pp. 36, 244, 371, 719.

†*Charientocrinus* **gen. n.** with *C. ithacensis* **sp. n.** Devon. N. York State, GOLDING Mem. N. York State Mus. **16** pp. 402–405 pl. liii figs. 1–4.

Charitometra, CLARK, A. H. **31** pp. 49, 264.

Chlorometra, CLARK, A. H. **31** pp. 264, 722.

Chondrometra, CLARK, A. H. **31** pp. 260, 297.

†*Clarkeocrinus* **gen. n.** type *Carabocrinus troosti* Hall, GOLDRING Mem. N. York State Mus. **16** pp. 179–185 pls. xxi xxiii; xxiv figs. 1–4; xxv.

†*Clidochirus iowensis*, C. (?) *maximus*, **spp. n.** Devon. Iowa, THOMAS Iowa Geol. Surv. **29** pp. 465–467 pls. xlii figs. 19–37; xliii figs. 10–44.—*C. schucherti* (Talbot), GOLDRING **79** p. 305 pl. xxxviii figs. 1–2.

†*Clonocrinus* (?) *macropetalus* (Hall), GOLDRING **79** p. 153 pl. xx fig. 10.

Coccometra, CLARK, A. H. **31** pp. 55, 267, 373 & **32** p. 41.

Colobometra, CLARK, A. H. **31** p. 246.

Comactinia, CLARK, A. H. **31** pp. 14, 233, 370, 509, 514, 706 & **32** p. 39.

Comantheria, CLARK, A. H., **31** pp. 234, 706–707.

Comanthina, CLARK, A. H. **31** pp. 236, 708.

†*Comanthocrinus*, GOLDRING **79** pp. 190–198 pl. xxiv figs. 5–9.

Comanthus wahlbergi, CLARK, H. L. **33** p. 231 pl. viii fig. 3.—*C.*, CLARK, A. H. **31** pp. 236, 351, 370–371, 514, 709–713 & **32** p. 39.

Comantula, CLARK, A. H. **31** p. 705.

Comaster, CLARK, A. H. **31** pp. 16, 233, 706.

Comasticrinus, CLARK, A. H. **31** p. 726.

Comatella, CLARK, A. H. **31** pp. 5, 231, 703.

Comatilia, CLARK, A. H. **31** pp. 11, 232 & **32** p. 39.

Comatonia, CLARK, A. H. **31** p. 232 & **32** p. 39.

†*Comatula*, GISLÉN **75** pp. 108, 109, 110, 111, 112, 113, 114.—*C.*, CLARK, A. H. **31** pp. 12, 233, 705.

Comatulella, CLARK, A. H. **31** p. 705.

Comatulida, GISLÉN **75** pp. 25, 72, 86.

Comatulides, CLARK, A. H. **31** p. 233.

†*Comaturella*, GISLÉN **75** p. 115.

Cominia occidentalis, CLARK, H. L. **33** p. 231.

Cosmiometra, CLARK, A. H. **31** pp. 252, 721.

Comissia, CLARK, A. H. **31** pp. 232 370, 513, 705.

Compsometra, CLARK, A. H. **31** pp. 265, 373, 527.

†*Conocrinus* with *C. cazioti, ventiensis*, **spp. n.**, Bartonian France, VALETTE Riv. Sci. Nice **2** pp. 25–32.

†*Conometra* **gen. n.** with *C. rugiana* **sp. n.** Upper Cretaceous Rügen, GISLÉN Zool. Bidr. Uppsala **9** pp. 166-167.

†Conometridae **fam. n.**, GISLÉN Zool. Bidr. Uppsala **9** p. 159.

†*Cordylocrinus*, GOLDRING **79** pp. 273–277 pl. xxxvi figs. 6–17.

†*Corematocrinus* **gen. n.** with *C. plumosus* **sp. n.** Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 434–437 pl. lvi figs. 6–9.

†*Corocrinus* **gen. n.** with *C. ornatus* **sp. n.** Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 202–206 pl. xxvi figs. 2–5.

Cotylometra, CLARK, A. H. **31** p. 246.

†*Cradeocrinus* **gen. n.** with *C. elongatus, pergracilis* **spp. n.** Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 347–351 pls. xli figs. 11–13; xlii fig. 1.

Craspedometra, CLARK, A. H. **31** pp. 25, 239.

†*Craterocrinus* **gen. n.** with *C. rudemanni, schoharie* **spp. n.** Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 185–190 pl. xx figs. 7–9.

Crinoidea, GISLÉN 75 p. 270.

Crinometra, CLARK, A. H. **31** pp. 48, 262, 297 and **32** p. 40.

Crossometra, CLARK, A. H. **31** p. 258.

Crotalometra, CLARK, A. H. **31** pp. 521, 721 and **32** p. 40.—*C. magnicirra*, CLARK, H. L. **33** p. 234.

†*Cyathocrinus* with *C. rockfordensis* **sp. n.** Devon. Iowa, THOMAS Iowa geol. Surv. **29** p. 477. pl. xliv figs. 11–16.

†*Cyclocrinus*, FOURTAU **69** p. 33.

Cyclometra, CLARK, A. H. **31** pp. 271, 724.

Cyllometra, CLARK, A. H. **31** pp. 37, 244, 719.

†*Cypelometra* **gen. n.** GISLÉN Zool. Bidr. Uppsala **9** p. 159.

†*Cyttarocrinus* with *C.* (?) *jewetti* **sp. n.** Devon. N. York State, GOLDRING, Mem. N. York State Mus. **16** pp. 265–273 pl. xxxvi figs. 1–5.

†*Dactylocrinus* with *D. stellatimbasalis* **sp. n.** Devon. Iowa, THOMAS Iowa Geol. Surv. **29** p. 469 pl. xliv figs. 1–5.—*D.*, BRANSON **14** p. 67.

Daidalometra, CLARK, A. H. **31** pp. 256, 721.

†*Decadocrinus decemnodosus, insolens, killawogensis, multinodosus* and var. *serratobrachiatus, D. rugistriatus*, **spp n.**, & **var. n.** Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 419–434 pls. liv figs. 11–19; lv figs. 1–11; lvi figs. 1–5.—*D. vintonensis* **sp. n.** Devon. Iowa, THOMAS Iowa geol. Surv. **29** p. 479 pl. xlv fig. 1.

Decametra, CLARK, A. H. **31** p. 244.

†*Delocrinus*, THOMAS **178**.

†*Deltacrinus clarus* (Hall), GOLDRING **79** p. 334 pl. xli fig. 5.—*D. barrisi* (Worth.), THOMAS **176** p. 476 pl. xliv figs. 20, 21.

Democrinus, CLARK, A. H. **31** p. 727 & **32** pp. 45–46.

†*Democrinus*, SPRINGER **169**.

†*Dendrocrinus kayi* **sp. n.** Ordovician Iowa, SLOCOM & FOERSTE Iowa Geol. Surv. **29** p. 335 pl. xxix figs. 1–4.

Dichrometra, CLARK, A. H. **31** pp. 242, 717.

†*Dimerocrinus* with *D. whitfieldi* **sp. n.** Devon. GOLDRING Mem. N. York State Mus. **16** pp. 83–86 pl. i figs. 1, 2.

Diplocrinus, CLARK, A. H., **32** p. 44.

†*Discometra* **gen. n.** GISLÉN Zool. Bidr. Uppsala **9** p. 180.

†*Dolatocrinus* with *D. liratus* var. *parvulus, marshi* var *glaber, D. insignis, lobatus*, **spp.** and **varr. n.** Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 155–179 pls. xvii figs. 1–14; xviii figs. 1–14; xix figs. 1–6; xx figs. 1–6.

Dorometra, CLARK, A. H. **31** pp. 265, 723.

†*Ectenocrinus raymondi* **sp. n.** Ordovician Iowa, SLOCOM & FOERSTE Iowa Geol. Surv. **29** p. 337 pl. xxix figs. 5–9.

†*Edriocrinus*, GOLDRING **79** pp. 445–456 pl. lviii figs. 1–21.—*E.*, STEWART IN BRANSON **14** p. 223.—*E.*, TANSEY IN BRANSON **14** p. 181.

†*Encrinites*, GOLDRING **79** p. 148.

Endoxocrinus, CLARK, A. H. **32** p. 44.

Erythrometra, CLARK, A. H. **31** pp. 57, 267, 724.

Eudiocrinus, CLARK, A. H. **31** pp. 22, 238.

Eudoxocrinus, CLARK, A. H. **31** pp. 299, 726.

Eumetra, CLARK, A. H. **31** pp. 265, 723.

Eumorphometra, CLARK, A. H. **31** p. 271.

†*Euryocrinus barrisi* Spring., THOMAS **176** p. 467 pls. xliv fig. 8; xlv fig. 12.

†*Eutaxocrinus* with *E. dumosus* **sp. n.** Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 309–318 pls. xxxviii figs. 8–12; xxxix figs. 1–17.—*E. gracilis* (Meek & Worth.), THOMAS **176** p. 471 pl. xliv figs. 17, 18.

Fariometra, CLARK, A. H. **31** p. 275.

Florometra, CLARK, A. H. **31** pp. 58. 270, 297, 589, 724.

†*Gennaerocrinus* with *G. carinatus* **var.** *crassicostatus*, *G. decorus*, *peculiaris* **spp.** & **var. n.** Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 208–226 pls. xxvii; xxx; xxxi figs. 1–10; xxxii figs. 1–8.

Gephyrocrinus, CLARK A. H. **31** p. 727 & **32** p. 46.

Gephyrometra, CLARK, A. H. **31** pp. 249, 720.

†*Gilbertsocrinus*, GOLDRING **79** p. 96 pl. iii figs. 1–6.

†*Glenotremites* with *G. angelini*, *batheri*, *parvicavus*, *valetti*, **spp. n.**, Upper Cretaceous, GISLÉN Zool. Bidr. Uppsala **9** pp. 124–139.

†*Glossocrinus* **gen. n.** with *G. naplesensis* **sp. n.** Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 389–397 pl. lii figs. 1–7.

Glyptometra, CLARK, A. H. **31** pp. 260, 523.

Hathrometra, CLARK, A. H. **31** pp. 63, 274, 299, 374, 359–364, 724–725 & **32** pp. 8, 42.—*H.* with *H. tenella* **var.** *sarsii* (Düb. and Kor.), GISLÉN **74**.—*H.*, MORTENSEN **131** p. 21.

†*Hallocrinus* **gen. n.** type *Cyathocrinus ornatissimus* Hall, GOLDRING Mem. N. York State Mus. **16** pp. 374–384 pls. xlix figs. 4, 5; l; li.

†*Halysiocrinus secundus* (Hall), GOLDRING **79** p. 337 pl. xli figs. 6–9.

†*Haplocrinus clio* Hall, GOLDRING **79** p. 326 pl. xl figs. 10–14.

Heliometra, CLARK, A. H. **31** pp. 268, 296, 348, 351, 528, 724 & **32** pp. 6, 42.

†*Hertha* with *H. pygmaea*, *suecica*, **spp. n.**, Upper Cretaceous, GISLÉN Zool. Bidr. Uppsala **9** pp. 176–180.

†*Heterocrinus*, SLOCOM & FOERSTE **164** p. 339.

Heterometra, CLARK, A. H. **31** pp. 25, 27, 239, 297, 714–715.

†*Hexacrinus* with *H. springeri*, *iowensis*, **spp. n.**, Devon. Iowa, THOMAS Iowa geol. Surv. **29** pp. 459–463 pls. xlii figs. 1–13; xliii figs. 1–9.

†*Himerocrinus* (?) *polydactylus* (Hall) GOLDRING **79** p. 198 pl. xx fig. 11.

†*Holocrinus wagneri* Ben sp. var. *quinqueverticillatus* [? **var. n.**] Trias Germany, WAGNER Jahrb. geol. Landesanst. **42** p. 5.

Holopus. CLARK, A. H. **31** p. 726 & **32** p. 44.

†*Holopus*, SPRINGER **169**.

Homalometra, CLARK, A. H. **31** pp. 240, 715.

Horaeometra, CLARK, A. H. **32** p. 40.

Hybometra, CLARK, A. H. **32** p. 41.

Hyocrinidae, GISLÉN **75** p. 23.

Hypalocrinus, CLARK, A. H. **31** pp. 299, 726.

Hypalometra, CLARK, A. H. **31** p. 267 & **32** pp. 41–42.

†*Hypsocrinus fieldi* Spring. and Slocum, GOLDRING **79** p. 322 pl. xl figs. 1–5.

Ilycrinus, CLARK, A. H. **31** p. 727 & **32** pp. 17, 45.

Iridometra, CLARK, A. H. **31** pp. 265, 723.

Isocrinus, CLARK, A. H. **31** pp. 299, 351, 726.

Isometra, CLARK, A. H. **31** pp. 274, 510, 528 & **32** p. 42.

†*Iteacrinus* **gen. n.** with *I. flagellum*, *robustus* **spp. n.** Devon. N. Nork State GOLDRING Mem. N. York State Mus. **16** pp. 344–347 pl. xlii figs. 2, 3.

†*Jaekelometra* **gen. n.** with *J. columnaris* **sp. n.** Upper Cretaceous Holland, GISLÉN Zool. Bidr. Uppsala **9** pp. 162–166.

†*Lagocrinus* gen. n. with *L. geniculatus*, *infundibuliformis* spp. n. Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 437–441 pl. lvii figs. 1–11.

Lamprometra, CLARK, A. H. **31** pp. 34, 244, 518, 717–718.

†*Lasiocrinus* with *L.* (?) *schohariensis* sp. n. Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 340–344 pls. xlii figs. 4–10; xliii figs. 1–7, 9.

Leptometra, CLARK, A. H. **31** pp. 272, 373, 528, 724 & **32** p. 42.

Leptonemaster, CLARK, A. H. **31** pp. 10, 232, 705 & **32** p. 39.

†*Lichenocrinus minutus* sp. n. Ordovician Iowa FOERSTE in SLOCUM & FOERSTE Iowa Geol. Surv. **29** p. 353 pl. xxx figs. 18, 19.

†*Liparocrinus* gen. n. with *L. batheri*, *halli*, spp. n., Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 397–402 pl. lii figs. 8–11.

Liparometra multicirra sp. n. Zululand, CLARK, H. L. Ann. S. Afric. Mus. **13** p. 232 pl. viii fig. 2.

Lissometra, CLARK, A. H. **31** p. 721.

†*Loriolocrinus*, GISLÉN **75** p. 190.

†*Loriolometra* gen. n., GISLÉN Zool. Bidr. Uppsala **9** p. 167.

†*Magistocrinus*, HAYASAKA **87** p. 61.

†*Maquoketocrinus* gen. n. with *M. ornatus* sp. n. Ordovician Iowa, SLOCOM & FOERSTE Iowa geol. Surv. **29** p. 330 pl. xxx figs. 12, 13.

†*Maragnicrinus portlandicus* Whitfield, GOLDRING **79** p. 384 pls. xlviii; xlix figs. 1–3.

Mariametra, CLARK, A. H. **31** pp. 31, 242, 718.

†*Mariacrinus*, GOLDRING **79** pp. 109–115 pls. v figs. 1–5; lix figs. 1–5.

†*Marsipocrinus tentaculatus* (Hall), GOLDRING **79** p. 277 pl. xxxvi fig. 18.

†*Megistocrinus* with *M. broadheadii*, *mineolaensis*, *missouriensis*, spp. n. Devon. Missouri, BRANSON Missouri Bur. Geol. Mines **1922** pp. 61, 64–66 pls. vi figs. 1, 2–4; viii figs. 1–2, 5–7.—*M.* with *M. robustus*, *fitzpatricki*, *clarkei*, *merrilli*, *pernodosus*, spp. n., Devon. Iowa, THOMAS Iowa Geol. Surv. **29** pp. 444–459 pls. xxxviii figs. 6–12; xxxix figs. 1–7; xl figs. 1–8; xli figs. 1–23; xlv figs. 3–7; xlvi figs. 9–11.—*M.*, GOLDRING **79** pp. 226–239 pls. xxxiii; xxxiv.

†*Melocrinites*, GOLDING **79** p. 108.

†*Melocrinus* with *M. nodosus* var. *irregularis*, *M.* (?) *linderi*, *M. belanskii* spp. and var. n. Devon. Iowa, THOMAS Iowa Geol. Surv. **29** pp. 435–442 pl. xxxvii figs. 1–16.—*M.* with *M. splendens*, *willetensis* and var. *perstriatus*, *M.* (*Trichotocrinus*) with *M.* (*T.* ?) *lutheri*, spp. and var. n. Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 115–153 pls. vi–vii; viii figs. 1–5; ix; xi; xii figs. 2–9; xiii figs 1–6; xiv; xv figs. 1–9; xvi figs. 1–12.—*M.*, BRANSON **14** pp. 59–60.

Metacrinus, GISLÉN **75** p. 22.

†*Metacrinus*, CLARK, A. H. **31** pp. 296, 726.

Microcomatula, CLARK, A. H. **32** p. 39.

†*Microcrinus*, SPRINGER **169**.

†*Mictocrinus* gen. n. with *M. robustus* sp. n. Devon. N. York State, GOLDRING Mem. N. York State Mus. pp. 361–363 pl. lx figs. 4, 5.

†*Millericrinus prattii*, BATHER **6**.—*M.*, FOURTAU **69** pp. 31–33.

†*Moenocrinus* gen. n. with *M. deechei* sp. n. Trias Germany, HILDEBRAND "Geologie and Morphologie der Umgebung von Westheim a. M." Karl. Henn Freiburg i. Br. **1924** pl. facing p. 40.

Monachocrinus coelus sp. n. S. Africa, CLARK, H. L. Ann. S. Afric. Mus. **13** p. 229 pl. viii fig. 1.—*M. sexradiatus* sp. n. S.W. of Iceland, CLARK, A. H. Danish Ingolf Exped. pt. 5 **4** pp. 23, 45.

Monachomera, CLARK, A. H. **31** p. 262.

†*Myrtillocrinus*, GOLDRING **79** pp. 358–361 pl. xliv figs. 11–15.

Nanometra, CLARK, A. H. **31** pp. 65, 267, 724.

Nemaster, CLARK, A. H. **31** pp. 9, 232, 705 & **32** p. 38.

†*Nemaster*, SPRINGER **169**.

Neocomatella, CLARK, A. H. **31** pp. 7, 231 & **32** pp. 38, 39.

Neocrinus, CLARK, A. H. **32** p. 44.

Neometra, CLARK, A. H. **31** pp. 40, 248, 720.

†*Nereocrinus antiquus*, WANNER **190** p. 227, pl. iv figs. 13–14.

Notocrinidae, GISLÉN **75** p. 167.

†Notocrinidae, GISLÉN **75** p. 167.

Notocrinus, CLARK, A. H. **31** pp. 272, 511 & **32** p. 43.

Oceanometra, CLARK, A. H. **31** pp. 256, 721.

Oligometra, CLARK, A. H. **31** pp. 37, 247.

Oligometrides, CLARK, A. H. **31** pp. 246, 719.

Orthometra, CLARK, A. H. **32** pp. 42, 57.

Oxymetra, CLARK, A. H. **31** pp. 242, 717.

†*Pachyantedon*, GISLÉN **75** pp. 120, 121.

Pachylometra sclateri CLARK, H. L. **33** p. 234.—*P.*, CLARK, A. H. **31** pp. 49, 259, 722.

†*Palaeantedon* **gen. n.** with *P. depressa* **sp. n.** Miocene Hungary, GISLÉN Zool. Bidr. Uppsala **9** pp. 182–185.

†Palaeantedonidae **fam. n.**, GISLÉN Zool. Bidr. Uppsala **9** p. 170.

†*Palaeocomaster* **gen. n.** with *P. stellatus* **sp. n.** Jura., England, GISLÉN Zool. Bidr. Uppsala **9** pp. 142–145.

†*Palermocrinus jaekeli* **sp. n.** Upper Permian Sicily, GISLÉN Zool. Bidr. Uppsala **9** pp. 197–200.

Parametra, CLARK, A. H. **31** pp. 47, 256, 297, 721.

Pectinometra, CLARK, A. H. **31** pp. 249, 720.

†*Pentacrinus*, CHECCHIA-RISPOLI **29** p. 72.—*P.*, FOURTAU **69** p. 33.—*P.*, SPRINGER **169**.

Pentametrocrinus, CLARK, A. H. **31** pp. 68, 275, 299, 374, 725 & **32** p. 44.—*P. varians*, CLARK, H. L. **33** p. 235.

Perissometra, CLARK, A. H. **31** pp. 49, 259, 297, 722.

Perometra, CLARK, A. H. **31** pp. 56, 267, 724.

Phrixometra, CLARK, A. H. **32** p. 43.

Phrynocrinidae, GISLÉN **75** p. 24.

Phrynocrinus, CLARK, A. H. **31** p. 727.

†*Placometra* **gen. n.** with *P. mortenseni* **sp. n.** Upper Cretaceous England, GISLÉN Zool. Bidr. Uppsala **9** p. 162.

Pœcilometra, CLARK, A. H. **31** pp. 49, 263, 722.

Poliometra **gen. n.**, CLARK, A. H. Danish Ingolf Exped. Pt. 5 **4** pp. 7 42.—*P.*, GISLÉN **74**.

Pontiometra, CLARK, A. H. **31** pp. 30, 242, 717.

†*Porocrinus fayettensis* **sp. n.** Ordovician Iowa, SLOCOM & FOERSTE Iowa Geol. Surv. **29** p. 233 pls. xxix figs. 14–22; xxx fig. 14.

†*Poteriocrinus* with *P.* (?) *dignatus* **sp. n.** Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 408–418 pl. liv figs. 1–10.—*P. buffaloensis* Worth., THOMAS **176** p. 478 pl. xlix fig. 19.

Proisocrinus, CLARK, A. H. **31** p. 727.

Promachocrinus, CLARK, A. H. **31** pp. 58, 268, 297, 520, 724.

Prometra, CLARK, A. H. **31** pp. 246, 719.

Psathyrometra, CLARK, A. H. **31** pp. 61, 271, 299, 373, 724.

†*Pterinocrinus* **gen. n.** with *P. quinquenodus*, **sp. n.** Devon. New York State, GOLDRING Mem. N. York State Mus. **16** pp. 86–89 pl. i figs. 3–10.

†*Pterocoma*, GISLÉN **75** pp. 121–123.

Pterometra, CLARK, A. H. **31** pp. 252, 721.

Ptilocrinus, CLARK, A. H. **31** pp. 299, 727.

Ptilometra, CLARK A. H. **31** pp. 42, 251, 297, 520, 721.

Rhizocrinus, CLARK, A. H. **31** p. 727 & **32** pp. 23, 45.—*R.*, MORTENSEN **131** p. 19.

†*Rhodocrinus* with *R. nodulosus* var. *pernodosus* **var. n.** Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 89–92 pl. ii figs. 1–6.

†*Saccocoma* with *S. cretacea* **sp. n.** Senonian England, BATHER Proc. Geol. Ass. **35** pp. 111–121 figs.

†*Saccocrinus* with *S.* (?) *hamiltonensis* **sp. n.** Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 206–208 pl. xxvi figs. 6–7.

Sarametra, CLARK, A. H. **31** pp. 271, 724.

†*Scaphiocrinus*, YANICHEVSKY **197** p. 33.

†*Schultzicrinus*, GOLDRING **79** pp. 351–353 pl. xliv figs. 1–10.

†*Scyphocrinus*, BRANSON **14** p. 180.

†*Semiometra* **gen. n.** with *S. pommerania, rowei, scanica,* **spp. n.**, Upper Cretaceous, GISLÉN Zool. Bidr. Uppsala **9** pp. 172–176.

Solanocrinidae **fam. n.**, GILSÉN Zool. Bidr. Uppsala **9** p. 145.

†*Solanocrinites*, GISLÉN **75** pp. 109, 110.

†*Solanocrinus* with *S. ooliticus* **sp. n.** Jura. England, GISLÉN Zool. Bidr. Uppsala **9** pp. 146–156.

Solanometra, CLARK, A. H. **31** p. 58.

†*Sphaerometra* **gen. n.**, GISLÉN Zool. Bidr. Uppsala **9** p. 169.

†*Sphaerotocrinus* **gen. n.** with *S. ornatus* **sp. n.** Devon. New York State, GOLDRING Mem. N. York State Mus. **16** pp. 99–102 pl. iii figs. 7–8.

Stenometra, CLARK, A. H. **31** pp. 48, 254, 721.

Stephanometra, CLARK, A. H. **31** pp. 241, 715, 717.

†*Stereocrinus* with *S. littletonensis* **sp. n.** Devon. Iowa, THOMAS Iowa Geol. Surv. **29** pp. 442–444 pl. xxxviii figs. 1–5.—*S.*, with *S. moori, springeri, vandiveri* **spp. n.**, Devon. Missouri, BRANSON Missouri, Bur. geol. Mines **1922** pp. 61–63 pls. vi figs. 5, 6; vii figs. 1–3, 6–8; viii fig. 8.

Stiremetra, CLARK, A. H. **31** p. 48 & **32** p. 40.

Strotometra, CLARK, A. H. **31** pp. 264, 722.

†*Stylocrinus* (?) *canandaigua* **sp. n.** Devon. N. York State, GOLDRING Mem. N. York. State Mus. **16** p. 331 pl. xl fig. 19.

Stylometra, CLARK, A. H. **31** pp. 46, 253 & **32** p. 40.

†*Symbathocrinus subtrigonalis, sulcatus,* **spp. n.**, Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 328–330 pl. xl figs. 15–17.

†*Synaptocrinus nuntius* (Hall), GOLDRING **79** p. 307 pl. xxxviii figs. 3–7.

†*Symbathocrinus matutinus* Hall, THOMAS **176** p. 475 pl. xliv fig. 9.

†*Taxocrinus interscapularis* Hall, THOMAS **176** p. 474 pl. xliv fig. 10.—*T. labatus* (Hall), GOLDRING **79** p. 318 pl. xxxix figs. 18–20.

Thalassocrinus, CLARK, A. H. **31** p. 727.

Thalassometra, CLARK, A. H. **31** pp. 45, 258, 721 & **32** p. 40.

†*Thamnocrinus* **gen. n.** with *T. springeri* **sp. n.** Devon. N. York State, GOLDRING Mem. N. York State Mus. **16** pp. 239–248 pl. xxvi figs. 8–10.

Thaumatocrinus jungerseni **sp. n.** S.W. of Iceland, CLARK, A. H. Danish Ingolf Exped. pt. 5 **4** pp. 13, 43–44.—*T.*, CLARK, A. H. **31** p. 275.

Thaumatometra with *T. septentrionalis* **sp. n.** S.W. of Iceland, CLARK, A. H., Danish Ingolf Exped. pt. 5 **4** pp. 13, 43.—*T.*, CLARK A. H. **31** pp. 66, 275, 575, 725.

†Thiolliercrinidae, GISLÉN **75** p. 185.

†*Thiollericrinus*, GISLÉN **75** p. 186.

†*Thylacocrinus*, GOLDRING **79** pp. 102–108 pl. iv. figs. 1–5.

Thysanometra, CLARK, A. H. **31** pp. 54, 265, 723.

Toxometra, CLARK, A. H. **31** pp. 265, 723.

Tropiometra carinata, CLARK, H. L. **33** p. 233.—*T.*, CLARK, A. H. **31** pp. 38, 247, 297, 371, 510, 520, 717 & **32** p. 39.

Trichometra, CLARK, A. H. **31** pp. 65, 275, 725 & **32** pp. 11, 43, 58.

†*Uintacrinus*, WITHERS **194**.

†*Woodocrinus*, WRIGHT **195**.

Zenometra, CLARK, A. H. **31** pp. 61, 271 & **32** p. 42.

Zygometra, CLARK, A. H. **31** pp. 19, 236, 297, 713–714.

CYSTIDEA & EDRIOASTEROIDEA.

†*Agelacrinites* with *A. hanoveri* **sp. n.** Devon. Iowa, THOMAS Iowa Geol. Surv. **29** pp. 419–421 pl. xlvi figs. 1–6.

†*Glyptosphaerites*, PILOTTI **141**.

†*Lipsanocystes* **gen. n.** with *L. traversensis* **sp. n.** Devon. Michigan, EHLERS & LEIGHLY Paprs. Mich. Acad. Sci. **2** p. 155 pl. x.

†*Pleurocystites* with *P. becheri, clermontensis, multistriatus*, **spp. n.**, Ordovician Iowa Foerste in SLOCOM & FOERSTE Iowa geol. Surv. **29** pp. 355–384 pls. xxxi fig. 12; xxxiii figs. 1–7; xxxiv figs 1A–D, 2A–C, 7A–D.

†*Strobilocystis* with *S. schucherti* **sp. n.** Devon. Iowa, THOMAS Iowa geol. Surv. **29** pp. 414, 419 pl. xxxv figs. 1–21.

BLASTOIDEA.

†*Anthoblastus* **gen. n.** with *A. brouweri stelliformis*, **spp. n.**, Permian Timor, WANNER Jaarb. Mijnw. Ned. Ost. Ind. **1922** pp. 205–209 pls. i figs. 4–11; iii fig. 13.

†*Calycoblastus*, WANNER **190** p. 219.

†*Codaster subtruncatus* (Hall), THOMAS **176** p. 422 pl. xxxvi fig. 15.

†*Indoblastus*, WANNER **190** p. 215.

†*Nannoblastus* **gen. n.** with *N. pyramidatus, cuspidatus* **spp. n.** Permian Timor, WANNER Jaarb. Mijnw. Ned. Ost. Ind. **1922** pp. 209–215 pls. i. figs. 1–3; iii figs. 8–9; iv fig. 10.

†*Neoschisma*, WANNER **190** p. 199.

†*Nucleocrinus* with *N. bondi* **sp. n.** Devon. Iowa, THOMAS Iowa geol. Surv. **29** pp. 423–434 pl. xxxvi figs. 2–12, 16–18.—*N.*, BRANSON **14** pp. 57, 132.

†*Orbitremites maleianus* and var. *constricta* **sp. & var. n.** Permian Timor WANNER Jaarb. Mijnw Ned. Ost. Ind. **1922** pp. 225–226 pls. iii figs. 10–12; iv figs. 3–9.

†*Pterotoblastus*, WANNER **190** p. 209.

†*Rhopaloblastus* **gen. n.** with *R. timoricus* **sp. n.** Permian Timor, WANNER Jaarb. Mijnw. Ned. Ost. Ind. **1922** pp. 215–219 pl. iii figs. 1–5.

†*Schizoblastus*, WANNER **190** pp. 219–222 pl. iv figs. 11–12.

†*Spharoschisma* **gen. n.** with *S. somoholense* **sp. n.** Permian Timor, WANNER Jaarb. Mijnw. Ned. Ost. Ind. **1922** pp. 196–197 pls. iii figs. 6–7; iv fig. 1.

†*Sundablastus*, WANNER **190** p. 209.

†*Thaumatoblastus* **gen. n.** with *T. longiramus, longispinus*, **spp. n.**, Permian Timor, WANNER Jaarb. Mijnw. Ned. Ost. Ind. **1922** pp. 199–204, 226 pls. ii figs. 1–20; iv fig. 2; v.

†*Timoroblastus*, WANNER **190** p. 215.

VI. VERMES

ARRANGED BY

H. M. WOODCOCK, D.Sc. (Lond.)

CONTENTS

PAGE

Titles (for all groups) 2

PLATYHELMINTHIA, NEMERTINEA, MESOZOA.

Subject-Index 20

Systematic 22

NEMATHELMINTHIA.

Subject-Index 27

Systematic 28

CHAETOGNATHA, GASTROTRICHA, ROTIFERA.

Subject-Index 32

Systematic 32

ANNELIDA, GEPHYREA, PHORONIDEA, PTEROBRANCHIATA.

Subject-Index 33

Systematic 34

I.—TITLES.

1.—Abeloos, M. Sur la structure et le fonctionnement des cellules adipeuses des Hirudinées Rhynchobdelles. C.R. Soc. Biol. Paris **90** 1924 pp. 922 & 923.

2.—Abeloos, M. Sur la constitution et le rôle physiologique de certaines cellules à granulations colorées du parenchyme des Hirudinées Rhynchobdelles. C.R. Soc. Biol. Paris **90** 1924 pp. 924 & 925.

3.—Abeloos, M. Sur les processus histophysiologiques de l'excrétion chez les Hirudinées Rhynchobdelles et sur la signification physiologique de certaines cellules de leur tissu conjonctif. C.R. Soc. Biol. Paris **90** 1924 pp. 1013–1015.

4.—Abeloos, M. Notes cytologiques sur les néphridies des Clepsines. C.R. Soc. Biol. Paris **90** 1924 pp. 1015 & 1016.

4a.—*Ackert, J. E. Notes on the longevity and infectivity of hookworm-larvae. Amer. J. Hyg. **4** 1924 pp. 222–225.

5.—Agersborg, H. P. Studies on the effect of parasitism upon the tissues. I. With special reference to certain Gasteropod Molluscs. Q. J. Microsc. Sci. London **68** 1924 pp. 361–401 pls. xii–xxi.

6.—Aiyer, K. S. Reproduction of the aquatic Oligochaete, *Nais paraguayensis*, Mich. Ann. Mag. Nat. Hist. London Ser. 9 **14** pp. 615–616.

Alleaux, V. *vide* Joyeux, C.

7.—Alsterberg, G. Die Nahrungszirkulation einiger Binnenseetypen. Arch. Hydrobiol. Stuttgart **15** 1924 pp. 291–338.

Anitschkov, N. N. *vide* Pawlowsky, E. N.

8.—Annenkova-Chlopina, N. P. Les *Ichthyotaeniidae* des poissons d'eau douce de Russie. Bull. Acad. Sci. Petrograd Ser. 6 **12** 1918 pp. 2129–2148 text-figs. [In Russian.]

9.—Annenkova-Chlopina, N. P. Deux nouvelles espèces du genre *Caryophyllaeus*. Bull. Acad. sci. Petrograd ser. 6 **13** 1919 pp. 97–110 8 text-figs. [In Russian.]

10.—Arndt, W. Weitere Untersuchungen über die Verbreitung der Bachtricladen. Arch. Hydrobiol. Stuttgart **15** 1924 pp. 237–249.

11.—Ashworth, J. H. Modern Zoology: some of its developments and its bearings on human welfare. Rep. Brit. Ass. London **91** 1924 pp. 108–125.

12.—Augener, H. Unempfindlichkeit von *Arenicola* gegen Fäulnis. Senckenbergiana Frankfurt **6** 1924 p. 244.

13.—Augener, H. Polychaeta I. Polychaeten von den Auckland- und Campbell- Inseln. Videns Medd. Kjöbenhavn **75** 1924 pp. 1–115 45 text-figs.

14.—Augener, H. Polychaeta II. Polychaeten von Neuseeland. I. Errantia. Videns. Medd. Kjöbenhavn **75** 1924 pp. 241–441 11 text-figs.

15.—Baer, J. G. Contribution à la faune helminthologique Sud-Africaine. (Note préliminiare.) Ann. Parasitol. Paris **2** 1924 pp. 239–247.

16.—Baer, J. G. Description of a new genus of *Lepodermatidae* (Trematoda) with a systematic essay on the family. Parasitol. Cambridge **16** 1924 pp. 22–31.

17.—Bahl, K. N. On the occurrence of the "enteronephric" type of nephridial system in earthworms of the genus *Lampito*. Q. J. Microsc. Sci. London **68** 1924 pp. 67–99 pl. ii.

18.—Barcroft, J. and **Barcroft,** H. The blood-pigment of *Arenicola*. Proc. Roy. Soc. London **B96** 1924 pp. 28–42.

Barker, J. L. *vide* Kepner, W. A.

19.—Basso, A. Ricerche morfologiche sulla *Taenia echinococcus* Linn. con speciale riferimento all'apparato sessuale. Arch. zool. ital. Napoli **9** 1920 pp. 165–194 pl. xiv.

20.—Baylis, H. A. The systematic position of the Nematoda. Ann. Mag. Nat. Hist. London ser. 9 **13** 1924 pp. 165–173.

21.—Baylis, H. A. The male of *Micropleura vivipara* (Nematoda). Ann. Mag. Nat. Hist. London ser. 9 **13** pp. 199–201.

22.—Baylis, H. A. A new species of *Physaloptera* (Nematoda) from an Australian lizard. Ann. Mag. Nat. Hist. London ser. 9 **13** 1924 pp. 309–311.

23.—Baylis, H. A. Some considerations on the host-distribution of parasitic Nematodes. J. Linn. Soc. Zool. London **36** 1924 pp. 13–23.

24.—Baylis, H. A. *Toxascaris leonina* as a parasite of the domestic cat. J. Parasitol. Urbana **10** 1924 p. 217.

25.—Baylis, H. A. Biographical notes on Bilharz, Looss and Lühe. Parasitol. Cambridge **16** 1924 pp. 332–340 portrait-pls. xxx–xxxii.

26.—Baylis, H. A. The range of variation of *Hymenolepis nana* in rats and mice. Parasitol. Cambridge **16** 1924 pp. 415–418.

27.—Baylis, H. A. and **Cannon, H. G.** A new Trematode from the grass-snake. Ann. Mag. Nat. Hist. London ser. 9 **13** 1924 pp. 194–196 pl. vi.

28.—Baylis, H. A. and **Cannon, H. G.** Further note on a new Trematode from the grass-snake. Ann. Mag. Nat. Hist. London ser. 9 **13** pp. 558 & 559.

29.—Beauchamp, P. de. Sur l'apparition de la variation dans les conditions expérimentales chez les Rotifères du genre *Brachionus*. C.R. Acad. Sci. Paris **179** 1924 pp. 1207–1209.

30.—Beauchamp, P. de. Sur la transmission de la variation chez les Rotifères du genre *Brachionus*. C.R. Acad. Sci. Paris **179** 1924 pp. 1290 & 1291.

31.—Beauchamp, P. de. Sur la formation des deux sortes d'oeufs chez *Mesostoma ehrenbergi* (Focke). C.R. Soc. biol. Paris **91** 1924 pp. 1280–1282.

32.—Beklimichev, W. N, (Quelques problèmes a la distribution des Triclades Paludicoles). [Russian, with French Summary.] Russ. Hydrobiol. Zeits. Saratow. **2** No. 8–10 1923 pp. 167–173.

33.—Beklemisev, A. Matériaux concernant la systématique et la faunistique des Turbellaria de la Russie de l'Est. Bull. Acad. Sci. Russ. Petrograd ser. 6 **15** 1921 pp. 631–656 3 pls.

34.—Bernard, N., Bablet, J. and **Pons, R.** Les vers intestinaux en Cochinchine. Bull. Soc. Path. exot. Paris **17** 1924 pp. 577–582.

35.—Bettencourt, A. Action de l'eau savonneuse sur le miracidium et la cercaire du *Schistosoma haematobium*. C.R. Soc. biol. Paris **91** 1924 pp. 226–230.

36.—Bhalerao, G. D. A contribution to the knowledge of the Trematode parasites of the food mammals of Rangoon. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 139–156 pls. vi–viii.

37.—Bianco, B. dal. Influenza di alcune sostanze sulla riproduzione di un Rotifero (*Proales felis*). J. exp. zool. Philadelphia **39** 1924 pp. 1–26 17 text-figs.

38.—Blacklock, D. B. and **Thompson, M. G.** Human schistosomiasis due to *S. haematobium* in Sierra Leone. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 211–234 pl. xiv.

39.—Blacklock, B. and **Thompson, M. G.** Observations on the classification of certain Schistosome *Cercariae*. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 235–237.

40.—Blanchard, M. et Laigret, J. Recherches sur la transmission d'*Onchocerca volvulus* par divers parasites hématophages. Bull. Soc. Path. exot. Paris **17** 1924 pp. 409–417.

41.—Blegvad, H. Preliminary note on the eggs and larvae of *Arenicola marina* L. Videns. Medd. Kjöbenhavn **76** 1923 pp. 1–3.

42.—Blunck, H. Die Ueberwinterung von *Gordius aquaticus* L. in *Dytiscus marginalis* L. Zool. Anz. Leipzig **61** pp. 266 & 267.

43.—Bock, S. Eine neue *Stylochoplana* aus Japan. Ark. Zool. Stockholm **16** 1924 No. 7 pp. 1–24 1 pl.

Bohn, G. *vide* Drzewina, A.

44.—Boulenger, C. A. The Filariid of the camel, *Acanthocheilonema evansi* (Lewis). Parasitol. Cambridge **16** 1924 pp. 419–423 4 text-figs.

45.—Braun, M. Die entwickelungsgeschichte des breiten Bandwurms. Schr. physik-ökonom. Ges. Königsberg **59** 1919 pp. 126–130.

Brown, G. *vide* Stiles, C. W.

46.—Brumpt, E. et **Joyeux,** C. Description d'un nouvel Echinocoque: *Echinococcus cruzi* n. sp. Ann. Parasitol. Paris **2** 1924 pp. 226–231 4 text-figs.

47.—Bryce, D. The Rotifera and Gastrotricha of Devil's and Stump Lakes, North Dakota, U.S.A. J. Quek. microsc. Cl. ser. 2 **15** No. 90 1924 pp. 81–108 pl. iii.

48.—Budington, R. A. The manner of copulation in a Turbellarian worm, *Planaria maculata.* Biol. Bull. Wood's Hole **47** 1924 pp. 298–303.

Cannon, H. G. *vide* Baylis, H. A.

Caullery, M. *vide* Mesnil, F.

49.—Cawston, F. G. The source of South African Trematodes. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp 343–346.

50.—Cawston, F. G. Some observations on the source of Bilharzia-infection and the combined treatment of a case in Natal. J. trop. Med. London **27** 1924 pp. 283 & 284.

51.—Cawston, F. G. Bilharzia: a paper for the practitioner. J. Trop. Med. London **27** 1924 pp. 322–326.

52.—Cawston, F. G. Distribution of snails serving as intermediate hosts of flukes in South Africa. Parasitol. Cambridge **16** 1924 pp. 67 & 68.

53.—Cawston, F. G. Experimental infestation of fresh-water snails. Trans. R. Soc. S. Africa Cape Town **12** 1924 p. lxxvii.

54—Cawston, F. G. The smaller South African shells that harbour *Cercariae.* Trans R. Soc. S. Africa Cape Town **12** 1924 pp. 13–15.

55.—Cecchini, C. L'apparato circolatorio della *Pheretima heterochaeta* (Michlsn). Arch. Zool. Napoli **8** 1916 pp. 7–47 pl. ii.

56.—Chandler, A. C. A note on *Ascaris lumbricoides* with three uteri and ovaries. J. Parasitol. Urbana **10** 1924 p. 208.

57.—Chandler, A. C. A new genus of Trichostrongylid worms from the kangaroo. Parasitol. Cambridge **16** 1924 pp. 160–163.

58.—Chandler, A. C. New *Filariae* from Indian birds. Parasitol. Cambridge **16** 1924 pp. 398–404.

59.—Chandler, A. C. Some parasitic round worms of the rabbit with descriptions of new species. Proc. U. S. Nat. Mus. Washington **66** Art. 16 1924 pp. 1–6 pls. i & ii.

60.—Chandler, A. C. Artificial cultivation of free-living Nematodes. Science New York N.S. **60** 1924 pp. 203 & 204.

61.—Chapin, E. A. Note on *Spironoura affine* Leidy 1856. J. Parasitol. Urbana **10** 1924 p. 212.

62.—Chapin, E. A. A species of round-worm (*Gongylonema*) from domestic swine in the United States. Proc. U. S. Nat. Mus. Washington **62** Art, 10 1922 pp. 1–3.

63.—Chapin, E. A. Nematode parasites of the Brazilian land-tortoise, *Testudo denticulata.* Proc. U. S. Nat. Mus. Washington **65** 1924 Art. 13 pp. 1–6 pls. i & ii.

64.—Cholodkovsky, N. Notes helminthologiques. Bull, Acad. Sci. Petrograd ser. 6 **12** 1918 pp. 2311–2316.

65.—Chuiton, F. le. Recherches sur l'épidémiologie de la filariose (*Filaria bancrofti* Cobbold 1877) en Cochinchine. Bull. Soc. Path. exot. Paris **17** 1924 pp. 405–409.

66.—Cillis, M. O. de. I Nematodi del lago stagno craterico di Astroni. Ann. Mus. zool. Univ. Napoli Suppl. No. **8** 1920 pp. 1–35 pl. xii.

67.—Ciurea, J. Heterophyidés de la faune parasitaire de Roumanie. Parasitol. Cambridge **16** 1924 pp. 1–21 pls. i–v.

68.—Clarke, J. M. Rosetted trails of the Palaeozoic. New York State Mus. Bull. Albany No. **251** 1924 pp. 128–130 **1** pl.

69.—Cobb, N. A. Two Tree-Infesting Nemas of the genus *Tylenchus*. An. Zool. Aplic. Santiago **9** 1922 pp. 27–35 3 text-figs.

70.—Cobb, N. A. [Five Nematode Notes.] J. Parasitol. Urbana **11** 1924 pp. 102–105 3 text-figs.

71.—Cobb, N. A. Observations on Nemas. J. Parasitol. Urbana **11** 1924 pp. 107–109.

72.—Cobb, N. A. Notes on the amphids of Nemas. J. Parasitol. Urbana **11** 1924 pp. 110 & 111 2 text-figs.

73.—Cobb, N. A. Food of Rhabdites and their relatives, with descriptions of two new Rhabdites and a new Rhabditoid genus. J. Parasitol. Urbana **11** 1924 pp. 116 & 117 1 text-fig.

74.—Cobb, N. A. [Four notes on Nemas.] J. Parasitol. Urbana **11** 1924 pp. 118–120 1 text-fig.

75.—Cockerell, J. D. Earthworms and the cluster-fly. Nature London **113** 1924 pp. 193 & 194.

76.—Cognetti de Martiis, L. Ricerche sulla struttura della *Phoenocora jucunda* Cogn. Arch. Zool. Napoli **8** 1916 pp. 189–247 pls. xi & xii.

77.—Colledge, W. R. A telescoping Rotifer. Queensl. Nat. **3** 1922 p. 111.

78.—Colledge, W. R. Notes on Rotifers and some of the life in the Chelmer swamp. Queensl. Nat. **4** 1923 pp. 57 & 58.

79.—Consoli, L. La rigenerazione in rapporto con la strobilazione negli Oligocheti limicoli. Boll. Inst. Zool. Univ. Palermo **1** Nos. 9 & 10 1923 pp. 1–18 2 pls.

80.—Copeland, M. and **Wieman,** H. L. The chemical sense and feeding behaviour of *Nereis virens* Sars. Biol. Bull. Wood's Hole **47** 1924 pp. 231–238.

81.—Cram, E. B. A new Nematode, *Cylindropharynx ornata*, from the zebra, with keys to related Nematode parasites of the *Equidae*. Journ. Agric. Research Washington **28** 1924 pp. 661–672 8 text-figs.

82.—Cram, E. B. The presence of *Bertiella delafondi* in the pigeon (*Columba domestica*) in the United States. J. Parasitol. Urbana **11** 1924 p. 115.

82a.—*Cram, E. B. A new Nematode, *Protospirura gracilis* from the cat. J. Amer. vet. Ass. **65** N.S. 18 No. 1 1924.

83.—Cullen, J. P. Human schistosomiasis in India. J. trop. Med. London **27** 1924 pp. 337 & 338.

Dantan, J. L. *vide* Gravier, C.

84.—Daubney, R. Description of a new Nematode, *Oesophagostomum mwanzae*, from the wart-hog. Ann. Mag. Nat. Hist. London Ser. 9 **13** 1924 pp. 542–546 4 text-figs.

85.—Dawydoff, C. Sur le retour d'une Némerte *Lineus lacteus* en inanition à un état embryonnaire. C.R. Acad. Sci. Paris **179** 1924 pp. 1222–1224.

86.—Dawydoff, C. La réduction chez une Némerte (*Lineus lacteus*). C.R. Acad. Sci. Paris **179** 1924 pp. 1361–1363.

87.—Day, H. B. The etiology of Egyptian splenomegaly and hepatic cirrhosis. Trans. R. Soc. trop. Med. London **18** 1924 pp. 121–130 2 pls.

88.—Dehorne, A. Les linocytes du liquide coelomique de *Glycera convoluta*. C.R. Acad. Sci. Paris **178** 1924 pp. 1331–1334.

89.—Dehorne, A. Multiplication asexuée chez *Dodecaceria* du Portel par émiettement métamérique, ou processus de ctenodrilisation. C.R. Acad. Sci. Paris **179** 1924 pp. 143–145.

90.—Dehorne, A. Observation sur les cellules sphéruleuses à corps réfringent des Enchytroeidés (Oligochètes). Ressemblances avec les formations myéliniques. C.R. Acad. Sci. Paris **179** 1924 pp. 1079–1081.

91.—Dehorne, A. Sur l'histophysiologie des cellules intestinales des Ascarides du cheval et de la tortue. C.R. Acad. Sci. Paris **179** 1924 pp. 1433–1436.

92.—Dehorne, A. Remarques sur quelques éléments figurés du sang des Glycères. C.R. Acad. Sci. Paris **178** 1924 pp. 1492–1495.

93.—Dehorne, A. Marche générale des phénomènes de myolyse chez *Hediste diversicolor*, pendant la maturation des ovocytes. C.R. Soc. biol. Paris **91** 1924 pp. 303 & 304.

94.—Dekhuyzen, M. C. Sur les enveloppes cutanées biologiquement semiperméables chez quelques animaux marins halisotoniques. Arch. Néerl. Sci. Soc. Holl. Haarlem IIIc **9** 1924 pp. 291–297.

Ditlevsen, H. *vide* Dollfus, R. P.

95.—Dollfus, R. P. Énumération des Cestodes du plancton et des Invertébrés marins. Ann. Parasitol. Paris **1** 1923 pp. 276–300, 363–394, **2** 1924 pp. 86–89.

96.—Dollfus, R. P. Remarques sur le cycle évolutif des Hémiurides. Ann. Parasitol. Paris **1** 1923 pp. 345–351 4 text-figs.

97.—Dollfus, R. P. Contribution à la faune des Invertébrés du banc de Rockall. (Matériaux récoltés par M. G. Hamel pendant la croisière du Pourquoi-Pas ? sous le commandement du Dr. J. B. Charcot.) Bul. Inst. océan. Monaco **438** 1924 pp. 1–25. [Nematoda and Polychaeta, determinations by **Ditlevsen, Fauvel.**]

98.—Dollfus, R. P. Qu'est-ce que "*Distoma subflavum*" Sonsino ? Bull. Soc. Path. exot. Paris **17** 1924 pp. 572–577.

99.—Dollfus, R. P. Sur un Distome de *Tropidonotus natrix* (L.). Bull. Soc. Zool. France Paris **49** 1924 pp. 268–276 8 text-figs.

100.—Dollfus, R. P. Polyxénie et progenèse de la larve métacercaire de *Pleurogenes medians* (Olsson). C.R. Acad. Sci. Paris **179** 1924 pp. 305–308.

101.—Drzewina, A. et **Bohn,** G. Expulsion des algues vertes symbiotiques chez les *Convoluta roscoffensis*, sous l'influence de l'acide carbonique. C.R. Acad. Sci. Paris **178** 1924 pp. 876–878.

102.—Drzewina, A. et **Bohn,** G. ction mortelle ou nulle de quelques acides sur *Convoluta roscoffensis*, de part et d'autre d'un point critique. C.R. Soc. Biol. Paris **90** 1924 pp. 625 & 626.

103.—Easman, M. C. Helminthiasis in the Sierra Leone Protectorate. J. trop. Med. London **27** 1924 pp. 304–307.

104.—Escomel, E. Essai sur la parasitologie d'Aréquipa (Pérou) et de ses environs. Bull. Soc. Path. exot. Paris **17** 1924 pp. 906–925 32 figs.

105.—Fadeew, N. N. (Materialen zur Rotatorienfauna Russlands. Einige Bemerkungen über die Aehnlichkeit des Rotatorienfauna Russlands und Amerikas.) [Russian, with German summary.] Russ. Hydrobiol. Zeits. Saratow **3.** No. 35 1924 pp. 72–80.

106.—Fage, L. Sur quelques Néréidiens à métamorphose incomplète. Bull. Soc. Zool. France Paris **49** pp. 46–58.

107.—Fairley, N. H. and **Liston,** W. G. Studies in the pathology of dracontiasis. Part I. Ind. J. Med. Res. Calcutta **11** 1924 pp. 915–932 pls. lviii–lxi.

108.—Fairley, N. H. and **Liston,** W. G. Studies in the transmission of *Dracunculus medinensis*—a negative experiment. Ind. J. Med. Research Calcutta **12** 1924 pp. 93–104.

109.—Fauré-Fremiet, E. L'oeuf de *Sabellaria alveolata* L. Arch. anat. microsc. Paris **20** 1924 pp. 211–342 89 text-figs.

110.—Faust, E. C. Observations on North China intestinal parasites of man. Amer. J. trop. Med. Baltimore **4** 1924 pp. 411–437.

111.—Faust, E. C. Some facts regarding the relation between nightsoil disposal in China and the propagation of Helminthic diseases. Amer. J. trop. Med. Baltimore **4** 1924 pp. 487–503 pl. i.

112.—Faust, E. C. The reactions of the miracidia of *Schistosoma japonicum* and *S. haematobium* in the presence of their intermediate hosts. J. Parasitol. Urbana **10** pp. 199–204 pl. xxii.

113.—Faust, E. C. Notes on *Ornithobilharzia odhneri* n. sp. from the Asiatic curlew. J. Parasitol. Urbana **11** 1924 pp. 50–54 pl. xiv.

114.—Faust, E. C. What constitutes a justifiable basis for systematic grouping of larval Trematodes ? J. Parasitol. Urbana **11** 1924 pp. 112–114 2 text-figs.

115.—Faust, E. C. *Cleistogama holothuriana*, a new type of Holostome Fluke. (Abstract.) J. Parasitol. Urbana **11** 1924 p. 121.

116.—Faust, E. C. Schistosomiasis in China: biological and practical aspects. Lancet London **1924** i pp. 21–24.

116a.—*Faust, E. C. Notes on larval flukes from China. II. Studies on some larval flukes from the Central and South Coast Provinces of China. Amer. J. Hyg. **4** 1924 pp. 241–300 pls. i & ii.

117.—Fauvel, P. Annélides Polychètes des Iles Gambier et de la Guyane. Mem. Pont. Accad. Nuovi Lincei Roma ser. 2 **6** 1923 pp. 89–147.

Fauvel, P. *vide* Dollfus, R. P.

118.—Feldkamp, J. Untersuchungen über die Geschlechtsmerkmale und die Begattung der Regenwürmer. Zool. Jahrb. Jena Abt. Anat. **46** 1924 pp. 609–632 pls. xxiii–xxv.

119.—Filipjev, I. N. Revision der Gattung *Adoncholaimus*. Zool. Anz. Leipzig **58** 1924 pp. 108–113.

120.—Filipjev, I. N. Ueber das Zellmosaik in der Epidermis von *Paroncholaimus zernovi m.* Zool. Anz. Leipzig **61** 1924 pp. 268–277.

121.—Filipjev, I. N. & **Michajlova,** E. Zahl der Entwicklungstadien bei *Enoplus communis* Bast. Zool. Anz. Leipzig **59** 1924 pp. 212–219.

122.—Findenegg, I. Beiträge zur Kenntnis der Familie *Typhloplanidae*. Zool. Anz. Leipzig **61** 1924 pp. 19–30.

123.—Finlay, H. J. Three fossil Annelids new to New Zealand. Trans. Proc. N. Zealand Inst. Wellington **55** 1924 pp. 448 & 449.

124.—Fischer, W. Beitrag zur Kenntnis der Sipunculiden. Ueber die verwandtschaftlichen Beziehungen der Arten *Phascolosoma margaritaceum* Sars, *Phasc. hanseni* Danielssen und Koren und *Phasc. trybomi* Théel. Zool. Anz. Leipzig **58** 1924 pp. 69–74.

125.—Fischer, W. Gephyreen des Golfes von Siam. Videns. Medd. Kjöbenhavn **76** 1923 pp. 21–27.

126.—Fox, H. M. On chlorocruorin. —I. Proc. Camb. Phil. Soc. (Biol. Sci.) **1** 1924 pp. 204–218.

127.—Fredericq, L. L'autotomie thermique des Planaires d'eau douce. Bull. Ac. roy. Belg. Bruxelles sér. 5 **10** 1924 pp. 167–170.

128.—Friend, H. Well-worms and their allies. Nature London **113** 1924 pp. 272 & 273.

129.—Friend, H. British earthworms and how to identify them. London (Epworth Press) **1923** pp. 1–64 plate-frontispiece & 28 text-figs.

130.—Fülleborn, F. Bemerkungen über die Identifikation von "Hakenwürmern." Arch. Schiffs. Tropen Hyg. Leipzig **28** 1924 pp. 12–15 pl. i.

131.—Fülleborn, F. Ueber den Infektionsweg bei *Hepaticola hepatica*. Arch. Schiffs. Tropenhyg. Leipzig **28** 1924 pp. 48–61 pl. iii.

132.—Fülleborn, F. Ueber "Taxis" (Tropismus) bei *Strongyloides-* und Ankylostomenlarven. Arch. Schiffs. Tropen Hyg. Leipzig **28** 1924 pp. 144–165.

133.—Fülleborn, F. The wandering of certain Nematode larvae in the body of their hosts. J. Parasitol. Urbana **11** 1924 pp. 98 & 99.

134.—Fuhrmann, O. Questions de nomenclature concernant le genre *Raillietina* Fuhrmann (syn.: *Davainea* Bl.). Ann. Parasitol. Paris **2** 1924 pp. 312 & 313.

135.—Fuhrmann, O. Two new species of Reptilian Cestodes. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 505–513.

136.—Fuhrmann, O. *Hymenolepis macracanthos* (v. Linstow). Considerations sur le genre *Hymenolepis*. J. Parasitol. Urbana **11** 1924 pp. 33–43 pl. xii.

137.—Fulinski, B. Die Entwickelungsgeschichte von *Dendrocoelum lacetum* Oerst. I. Teil: Die erste Entwickelungsphase vom Ei bis zur Embryonalpharynxbildung. Bull. intern. Acad. Cracovie **1914 B** pp. 147–190 pls. viii & ix.

138.—Gedoelst, L. Un Syngame parasite de l'hippopotame. Ann. Parasitol. Paris **2** 1924 pp. 307–311 3 text-figs.

139.—Gelei, J. v. Existiert eine Selbstfruchtung bei den Planarien? Biol. Centralbl. Leipzig **44** 1924 pp. 295–299.

140.—Goddard, E. J. On *Pelodrilus africanus*, a new Haplotaxid from South Africa. Trans. R. Soc. S. Africa Cape Town **12** 1924 p. xii.

141.—Goddard, E. J. Some observations on *Ozobranchus branchiatus.* Trans. R. Soc. S. Africa Cape Town **12** 1924 p. xiv.

142.—Goetsch, W. Lebensraum und Körpergrösse. Biol. Centralbl. Leipzig **44** 1924 pp. 529–560.

143.—Goetsch, W. Versuche über den Einfluss des Lebensraums auf die Körpergrösse von Hydren, Planarien und Kaulquappen. Verh. D. zool. Ges. Berlin **29** 1924 pp. 60–62.

144.—Goldsmith, —. La lumière et ses relations symbiotiques chez la *Convoluta roscoffensis.* C.R. Acad. Sci. Paris **179** 1924 pp. 1639–1641.

145.—Gordon, R. M. & Macfie, J. W. The hatching *in vitro* of the eggs of *Oxyuris equi.* Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 239 & 240.

146.—Graff, L. v. Turbellaria in: Brown, H. G. Klassen und Ordnungen des Tier-Reichs. Bd. **4.** Vermes. Lief. **145–177** pp. 2961–3369 (8o. Leipzig 1915–1917).

147.—Gravier, C. Sur le "Palolo" des Nouvelles-Hébrides. (D'après les renseignements fournis par le P. Suas, missionaire à Aoba (Ile des Lépreux). Bul. Mus. Paris 1924 pp. 472–474.

148.—Gravier, C. et Dantan, J. L. Sur deux Nérédiens (Annélides Polychètes) de la Baie d'Alger. Bul. Mus. Paris **1924** pp. 464–471 12 text-figs.

149.—Graybill, H. W. *Capillaria columbae* (Rud.) from the chicken and turkey. J. Parasitol. Urbana **10** 1924 pp. 205–207 pl. xxiii.

150.—Graybill, H. W. *Obeliscoides,* a new name for the Nematode genus *Obeliscus.* Parasitol. Cambridge **16** 1924 p. 317.

151.—Graybill, H. W. A new species of round worm of the genus *Trichostrongylus* from the rabbit. Proc. U. S. Nat. Mus. Washington **66** Art. 11 pp. 1–3 pl. i.

152.—Graybill, H. W. The life-history of *Hymenolepis nana* v. Sieb. Trans. R. Soc. trop. Med. London **18** 1924 pp. 217 & 218.

153.—Grobbelaar, C. S. I.—On some South African *Paramphistomidae.* II.—On some Trematodes in South African Anura and the relationships and distribution of their hosts. Trans. R. Soc. S. Africa Cape Town **12** 1924 pp. xcvi & xcvii.

154.—Guberlet, J. E. Notes on the life-history of *Ascaridia perspicillum* (Rud.). Trans. Amer. Microsc. Soc. Menasha Wis. **43** 1924 pp. 152–156.

155.—Hämmerling, J. Ueber dauernd teilungsfähige Körperzellen bei *Aeolosoma hemprichi* (Ehrbg.) (Vorl. Mitth.). Biol. Centralbl. Leipzig **44** 1924 pp. 169–173.

156.—Hämmerling, J. Die ungeschlechtliche Fortpflanzung und Regeneration bei *Aeolosoma hemprichii.* Histologische und experimentelle Untersuchungen. Zool. Jahrb. Jena Abt. allg. Zool. **41** 1924 pp. 581–656 pls. xvi–xix.

157.—Harding, W. A. Descriptions of some new leeches from India, Burma, and Ceylon. Ann. Mag. Nat. Hist. London ser. 9 **14** 1924 pp. 489–499 pls. ix–xv.

158.—Harnisch, O. Studien zur Oekologie der Moorfauna. Biol. Centralbl. Leipzig **44** 1924 pp. 110–127.

159.—Hart, P. C. L'action des ions Na, K et Ca et du nitrate d'uranyle sur les mouvements rythmiques spontanés du sac musculo-cutané du Lombric. Arch. Néerl. Sci. Soc. Holl. Haarlem IIIc **9** 1924 pp. 1–29.

160.—Hasegawa, T. Beitrag zur Entwicklung von *Trichocephalus* im Wirte. Arch. Schiffs. Tropen Hyg. Leipzig **28** 1924 pp. 337–340 4 figs.

161.—Haswell, W. A. Critical notes on the Temnocephaloidea. Proc. Linn. Soc. N.S. Wales Sydney **49** 1924 pp. 509–521 pls. liv–lvi.

162.—Hauer, J. Zur Kenntnis des Rotatorien-Genus *Colurella* Bory de St. Vincent. Zool. Anz. Leipzig **59** 1924 pp. 177–189 7 text-figs.

163.—Hauer, J. *Lecane lauterborni* n. sp. und einige für die deutsche Fauna neue *Lecane-* und *Monostyla-*Arten. Zool. Anz. Leipzig **61** 1924 pp. 145–149.

164.—Hegner, R. W. Medical Zoology and human disease. Science New York N.S. **60** 1924 pp. 551–558.

165.—Heider, K. Vom Zahnwechsel bei polychäten Anneliden. SitzBer. Ak. Wiss. Berlin **1924** pp. 258–260.

166.—Herpin, R. Les périodes d'épitoquie de quelques Néréidiens et leur relation avec les phases de la lune. C.R. Acad. Sci. Paris **178** 1924 pp. 426–428.

167.—Herpin, R. L'essaimage de *Perinereis marionii* (Aud. et Edwards). Le cycle évolutif de *Platynereis dumerilii* (Aud. et Edwards). C.R. Acad. Sci. Paris **179** 1924 pp. 1209–1212.

168.—Herpin, R. Essaimage et développement d'un Eunicien et d'un Syllidien. C.R. Acad. Sci. Paris **179** 1924 pp. 1431–1433.

169.—Hinrichs, M. A. A study of the physiological effects of caffein upon *Planaria dorotocephala*. J. exp. zool. Philadelphia **40** 1924 pp. 271–300.

170.—Höppli, R. Ueber sechs bisher noch nicht bekannte Sinnesorgane an den Lippen der Ascariden. Zool. Anz. Leipzig **61** 1924 pp. 39–42.

171.—Hörstadius, S. Weitere Studien über die Physiologie der Eireifung bei *Pomatoceros triqueter* L. Ark. Zool. Stockholm **16** 1924 No. 11 pp. 1–4.

172.—Honda, H. Resistance of *Rhabditis* to acids. Biol. Bull. Wood's Hole **46** 1924 pp. 95–99.

173.—Hyman, L. H. Some technical methods for *Hydra* and *Planaria*. Trans. Amer. Microsc. Soc. Menasha Wis. **43** 1924 pp. 68–71.

174.—Hyman, L. H., Willier, B. H. & Rifenburgh, S. A. Physiological studies on *Planaria*. VI. A respiratory and histo-chemical investigation of the source of the increased metabolism after feeding. J. exp. Zool. Philadelphia **40** 1924 pp. 473–494.

175.—Ihle, J. E. & van Oordt, G. J. On the development of the larva of the fourth stage of *Strongylus vulgaris* (Looss). Proc. Akad. Wet. Amsterdam **27** 1924 pp. 194–200.

176.—Ingram, A. Note on a possible intermediate host of *Schistosoma haematobium* in the Gold Coast. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 265 & 266.

177.—Isaitchikov, J. M. Des variations individuelles chez *Gymnophallus choledochus* (Odhner, 1900). C.R. Soc. biol. Paris **91** 1924 pp. 1187–1189 8 text-figs.

178.—Isobé, M. Présence de *Taenia hydatigena* Pallas 1766 chez *Macacus cynomolgus* L. Ann. Parasitol. Paris **2** 1924 pp. 236–238.

180.—Jacek, S. Untersuchungen über den Stoffwechsel der rhabdocölen Turbellarien. Bull. intern. Acad. Cracovie **1916 B** pp. 241–261 pl. x.

181.—Janda, V. Die Regeneration der Geschlechtsorgane bei *Rhynchelmis limosella* Hoffm. Zool. Anz. Leipzig **59** 1924 pp. 257–269 5 text-figs.

182.—Jenkins, J. R. Observations on the life-history of tape-worms of the genus *Moniezia*. Ann. appl. Biol. Cambridge **11** 1924 pp. 339–348 pl. xiv.

183.—Johnston, T. H. An Australian Caryophyllaeid Cestode. Proc. Linn. Soc. N. S. Wales Sydney **49** 1924 pp. 339–347 17 text-figs.

184.—Joyeux, C. Présence de *Dinobothrium plicitum*; Linton 1922 chez *Cetorhinus maximus* L. Ann. Parasitol. Paris **1** 1923 p. 343.

185.—Joyeux, C. Recherches sur le cycle évolutif des *Cylindrotaenia*. Ann. Parasitol. Paris **2** 1924 pp. 74–81 1 text-fig.

186.—Joyeux, C. Cestodes des poules d'Indo-Chine. Ann. Parasitol. Paris **2** 1924 pp. 314–318 3 text-figs.

187.—Joyeux, C. & Alleaux, V. Un cas de ladrerie chez le lapin domestique (*Oryctolagus cuniculus* var. *domesticus*). Ann. Parasitol. Paris **2** 1924 pp. 319–321.

188.—Keil, E. Studien über Regulationserscheinungen an *Polycelis nigra*. Arch. mikrosk. Anat. Entwickmech. Berlin **102** 1924 pp. 452–488 24 text-figs.

189.—Kepner, W. A. & Barker, J. L. Nematocysts of *Microstoma*. Biol. Bull. Wood's Hole **47** 1924 pp. 239–251 1 pl.

190.—Khalil, M. The source of infection with *Heterophyes heterophyes* in Egypt. Lancet London **1924 1** p. 952.

191.—Khouri, J. Recherches sur l'hématurie en Egypte. Bull. Soc. Path. exot. Paris **17** 1924 pp. 811–818.

191a.—*Kobayashi, H. On the human liver-fluke in Korea and a note on the intermediate hosts of the liver-fluke in China. Mitt. med. Hochsch. Keijo **1924** pp. 1–10.

192.—Kochanowski, J. Anatomie microscopique du système nerveux du *Gigantorhynchus hirudinaceus* (Acanthocéphales). C.R. Soc. biol. Paris **91** 1924 pp. 711–713.

193.—Korke, V. T. On a new *Microfilaria* from the dog, *Microfilaria lewisii* (n.s.). Ind. J. Med. Research Calcutta **11** 1924 pp. 1231–1238 pl. lxxxiv.

194.—Korke, V. T. Revision of the type-species of Rudolphi in India. *Spiroptera sanguinolenta* (Rud. 1819); *Spirocerca sanguinolenta* (R. & H. 1911). Ind. J. Med. Res. Calcutta **11** 1924 pp. 1239–1243.

195.—Kostileff, N. Le genre *Leptorhynchoides*, nouveau genre d'Acanthocephale parasite des poissons. Ann. Parasitol. Paris **2** 1924 pp. 214–223 3 text-figs.

196.—Kostylev, N. N. (Ueber die Acanthocephalen-fauna der Wolga und ihrer Nebenflüsse.) [Russian, with German summary.] Arb. biol. Wolga-Station Saratow **7** pts. 4 & 5 1924 pp. 142–148.

197.—Kostylev, N. N. On the excretory organs in *Gigantorhynchus major* Bremser. Bull. Acad. Sci. Petrograd ser. 6 **12** 1918 pp. 1687–1689.

198.—Kosuge, I. Histologische Untersuchungen über das Eindringen von *Strongyloides stercoralis* in die Haut von Versuchstieren. Arch. Schiffs. Tropen Hyg. Leipzig **28** 1924 pp. 15–20 pl. ii.

199.—Kosuge, I. Wie weit wirken bei dem Eindringen von *Strongyloides*-larven und anderen parasitischen Nematoden in das Gewebe spezifische Reizen? Arch. Schiffs. Tropen Hyg. Leipzig **28** 1924 pp. 179–187.

200.—Kosuge, I. Beiträge aur Biologie der *Microfilaria immitis*. Arch. Schiffs. Tropenhyg. Leipzig **28** 1924 pp. 340–351.

201.—Kowalewski, M. The genus *Aulodrilus* Bretscher 1899 and its representatives. Bull, intern. Acad. Cracovie **1914 B** pp. 598–604 pls. xxxvii–xxxix.

202.—Kowalewski, M. *Marionina tatrensis*, nova species Enchytraeidarum. Bull. intern. Acad. Cracovie **1916B** pp. 1 & 2.

203.—Kowalewski, M. A contribution to the knowledge of the Oligochaete, *Amphichaeta leydigi* (Tauber 1879) M. Kowalewski 1910. Bull. intern. Acad. Cracovie **1916 B** pp. 77–80.

204.—Kowalewski, M. Some remarks upon the reproductive organs in the genus *Chaetogaster* v. Baer 1827. Bull. intern. Acad. Cracovie **1916 B** pp. 201 & 202.

205.—Kowalewski, M. Notes on Oligochaeta. Bull. intern. Acad. Cracovie **1918 B** pp. 131–133 pl. ix.

206.—Kreis, A. Contribution à la connaissance des Nématodes libres du Surinam (Guyane hollandaise). Ann. biol. lacustre Bruxelles **13** 1924 pp. 123–136 1 pl.

207.—Kreis, H. A. Die Seen im Aela- und Tinzenhorngebiet. — II. Jahresber. natf. Ges. Graubündens Chur **63** 1924 pp. 23–68.

208.—Krmpotić, I. Beitrag zur Kenntnis der Entomostraken und Rotatorien, insbesonders der Diaptomiden Kroatiens und Slavoniens. (Bemerkungen zur Systematik der Diaptomiden.) Arch. Hydrobiol. Stuttgart **15** 1924 pp. 5–69 pls. ii–v.

209.—Kuhl, W. Das Retrocerebralorgan der Chaetognathen. Untersuchungen an *Sagitta setosa* und *elegans arctica*. Abh. Senckenb. natf. Ges. Frankfurt **38** 1924 pp. 205–220 pls. xxvii–xxxi.

210.—*Kulmatycki, W. J. *Caryophyllaeus niloticus* nov. sp. (Res. Swedish Zoological Exped. Egypt and White Nile 1901). No. **27a** 1924.

211.—Labbé, A. Introduction à l'étude des milieux marins hyperalcalins. Arch. Zool. Paris **62** 1924 pp. 401–568 pl. xvii.

212.—Lagrange, M. E. Sur un Trichocéphalidé du rat, à Shanghai, *Hepaticola hepatica*, Hall 1916. Bull. Soc. Path. exot. Paris **17** 1924 pp. 658 & 659.

Laigret, J. *vide* Blanchard, M.

213.—Lane, C. *Gastrodiscus hominis.* Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 17–32.

214.—Lane, C. The mass-diagnosis of Ankylostome infestation. (Parts II to VII.) Trans. R. Soc. trop. Med. London **17** 1924 pp. 407–436.

215.—Langeron, M. Recherches sur les Cercaires des piscines de Gafsa et enquête sur la bilharziose tunisienne (Septembre-Octobre 1920). Arch. Inst. Pasteur Tunis **13** 1924 pp. 19–67 28 text-figs.

216.—La Rue, G. L. Dried preparations of earthworms. Science New York N.S. **59** 1924 pp. 65 & 66.

217.—Leidy, J. The haemotoxins of intestinal parasites. A critical summary with notes on some cases. J. Parasitol. Urbana **19** 1924 pp. 147–152.

218.—Leigh-Sharpe, W. H. An abnormal ovary in an earthworm. Ann. Mag. Nat. Hist. London Ser. 9 **13** pp. 554–556.

219.—Leissling, R. Das Männchen von *Euchlanis deflexa* Gosse. Zool. Anz. Leipzig **59** 1924 pp. 48–51.

220.—Leissling, R. Zur Kenntnis von *Pompholyx sulcata* Hudson. Zool. Anz. Leipzig **59** 1924 pp. 88–100.

221.—Le Roux, P. L. *Strongylidae* from Edinburgh horses. Ann. trop. Med. Parasitol. Liverpool **18** 1924 p. 127.

222.—Lewaschoff. M. M. Uber die Parasiten des "Weissfisches" [*Stenodus leucichthys* (Gülaénstäats)] und des ponto-Kaspischen Lachses (*Salmo trutta latrax* Pallas). [Russian, with German summary.] Arb. Biol. Wolga-Station Saratow **7** No. 4–5 1924 pp. 177–188.

223.—Linton, E. Notes on Cestode parasites of sharks and skates. Proc. U. S. Nat. Mus. Washington **64** 1924 Art. 21 pp. 1–114 pls. i–xiii.

Liston, W. G. *vide* Fairley, N. H.

224.—Lutz, A. Sur le *Dictyophyme renalis.* C.R. Soc. Biol. Paris **90** 1924 p. 696.

225.—Lutz, A. Estudos sobre a evolução dos Endotrematodes brazileiros. Parte especial: 1. *Echinostomidae.* (Untersuchungen über die Entwicklungsgeschichte brasilianischer Trematoden. Specieller Teil: 1. *Echinostomidae.*) Mem. Inst. Oswaldo Cruz Rio de Janeiro **17** 1924 pp. 55–73 pls. v–xii. (German translation, pp. 75–93.)

226.—Macfie, J. W. *Saurositus agamae* n. g., n. sp., a Filarioid parasite of the lizard, *Agama colonorum.* Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 409–412.

Macfie, J. W. *vide* Gordon, R. M.

227. McIntosh, W. C. Notes from the Gatty Marine Laboratory, St. Andrews.—No. XLVI. Ann. Mag. Nat. Hist. London ser. 9 **14** 1924 pp. 1–52.

228.—McIntosh, W. C. On two tubes of *Polyodontes* and on the discharge of the ova in *Thelepus.* Q. J. microsc. Sci. London **68** 1924 pp. 603–613 pl. xxx.

229.—McIntosh, W. C. A monograph of the British Marine Annelids. Vol. **4,** Pt. II. Polychaeta—*Sabellidae* to *Serpulidae* with additions to the British Marine Polychaeta during the publication of the monograph. London (Ray Society) 1923 pp. xii + 251–538 pls. cxii–cxxxviii.

230.—McLearn, F. H. Palaeontology of the Silurian Rocks of Arisaig, Nova Scotia. Mem. Geol. Surv. Canada Ottawa **137** (Geol. ser. 118) 1924 pp. 1–180 pls. i–xxx.

231.—Magrath, T. B. *Ophiotaenia testudo* a new species from *Amyda spinifera.* J. Parasitol. Urbana **11** 1924 pp. 44–49 pl. xiii.

232.—Malaquin, A. Les glandes génitales et les cellules sexuelles primordiales chez l'Annélide *Salmacina dysteri* (Huxley). La genèse des ébauches génitales par des gonocytes extracoelomiques. C.R. Acad. Sci. Paris **179** 1924 pp. 1348–1351.

233.—Malaquin, A. Les glandes génitales et les cellules sexuelles primordiales chez l'Annélide *Salmacina dysteri* (Huxley). La filiation des cellules sexuelles (gonocytes): leur origin dans le bourgeon caudal. C.R. Acad. Sci. Paris **179** 1924 pp. 1636–1639.

234.—Manalang, C. Note on *Ankylostoma braziliense* as a human parasite in the Philippines. J. Parasitol. Urbana **11** 1924 p. 90.

235.—Maplestone, P. A. A survey of the parasites found in natives of Sierra Leone. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 183–187.

236.—Maplestone, P. A. A critical examination of Stoll's method of counting hookworm eggs in faeces. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 189–194.

237.—Marjoribanks, R. M. and **Le Sueur,** E. J. A case of *Sparganum prolifer*-infection. Trans. R. Soc. Trop. Med. London **18** 1924 p. 70.

238.—Martini, E. Ueber die Präparation von Rädertieren in toto. Intern. Rev. Hydrobiol. Leipzig **12** 1924 pp. 36–47.

239.—Mathias, P. Contribution à l'étude du cycle évolutif d'un Trématode de la famille des *Pleurogenetinae* Lss. (*Pleurogenes medians* Olss.). Bull. Soc. Zool. France Paris **49** 1924 pp. 375–377 4 text-figs.

240.—Mathias, P. Sur le cycle évolutif d'un Trématode de la famille des *Psilostomidae* (*Psilotrema spiculigerum* Mühling). C.R. Acad. Sci. Paris **178** 1924 pp. 1217–1219.

241.—Mathias, P. Cycle évolutif d'un Trématode échinostome (*Hypoderaeum conoideum* Bloch.). C.R. Soc. Biol. Paris **90** 1924 pp. 13–15.

242.—May, H. G. *Nematodirus furcatus* a synonym of *N. filicollis*. J. Parasitol. Urbana **10** 1924 pp. 212 & 213.

243.—Mazza, S. Note sur les Cestodes des chats des environs des abattoirs de Tunis. Arch. Inst. Pasteur Tunis **13** 1924 pp. 120–124.

244.—Meek, A. and **Storrow,** B. On a pelagic phase of *Arenicola marina* and of *Eteone arctica*. Ann. Mag. Nat. Hist. London ser. 9 **14** 1924 pp. 453–455 pl. vii.

245.—Meggitt, F. J. On the occurrence of *Ligula ranarum* in a frog. Ann. Mag. Nat. Hist. London ser. 9 **13** pp. 216–219.

246.—Meggitt, F. J. On the life-history of a Reptilian tapeworm (*Sparganum reptans*). Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 195–204 pl. ix.

247.—Meggitt, F. J. On two species of Cestoda from a mongoose. Parasitol. Cambridge **16** 1924 pp. 48–54.

248.—Meggitt, F. J. The tapeworms of the Rangoon pigeon. Parasitol. Cambridge **16** 1924 pp. 303–312 pl. xiii.

249.—Meggitt, F. J. and **Saw,** M. R. On a new tapeworm from the duck. Ann. Mag. Nat. Hist. London ser. 9 **14** 1924 pp. 324–326.

250.—Mehra, H. R. The genital organs of *Stylaria lacustris*, with an account of their development. Q. J. Microsc. Sci. London **68** 1924 pp. 147–186 pls. iv & v.

251.—Meixner, J. Ueber das Ovarium von *Microstomum lineare* (Müll.) und die Abscheidungsfolge des Schalen- und Dottermaterials bei rhabdocoelen Turbellarien. Zool. Anz. Leipzig **58** 1924 pp. 195–213 5 text-figs.

252.—Meixner, J. Studien zu einer Monographie der Kalyptorhynchia und zum System der Turbellaria Rhabdocoela. Zool. Anz. Leipzig **60** 1924 pp. 89–105, 113–125 20 text-figs.

253.—Menzel, R. Ueber die Verbreitung von *Rhabditis*-Larven durch Dipteren. Zool. Anz. Leipzig **58** 1924 pp. 345–348.

254.—Mesnil, F. et **Caullery,** M. Sur la complexité du cycle évolutif des Annélides polychètes. C.R. Acad. Sci. Paris **178** 1924 pp. 168–171.

255.—Meyer, A. Ueber die Segmentalorgane von *Tomopteris helgolandica* nebst Bemerkungen über das Nervensystem und die rosettenförmigen Organe Zool. Anz. Leipzig **60** 1924 pp. 83–88.

256.—Mhaskar, K. S. Hookworm infection in the soil. Ind. J. Med. Res. Calcutta **11** 1924 pp. 951–960.

257.—Michaelsen, W. Die Oligochaeten der Wolga. Arb. Biol. Wolga-Station Saratow. **7** No. 1–2 1923 pp. 30–43.

258.—Michaelsen, W. Oligochäten von Hollandisch-Neuguinea. Nova Guinea Leide **15** Zool. Livr. **1** 1924 pp. 18–27 6 text-figs.

259. Michaelsen, W. Oligochäten von Neuseeland und den Auckland-Campbell-Inseln, nebst einigen anderen Pacifischen Formen. Videns. Medd. Kjöbenhavn **75** 1924 pp. 197–240 8 text-figs.

Michajlova, E. *vide* Filipjev, I. N.

260.—Michel, A. Histogenèse des élytres en régénération chez *Halosydna gelatinosa.* C.R. Acad. Sci. Paris **178** 1924 pp. 134–136.

261.—Micoletzky, H. Freilebende Nematoden der Wolga. Arb. Biol. Wolga-Station Saratow **7** No. 1–2 1923 pp. 3–29 7 text-figs.

262.—Micoletzky, H. Weitere Beiträge zur Kenntniss freilebender Nematoden aus Suez. SitzBer. Akad. Wiss. Wien Abt. 1 **132** 1924 pp. 225–261 4 text-figs.

263.—Micoletzky, H. Letzter Bericht über freilebende Nematoden aus Suez. SitzBer. Akad. Wiss. Wien Abt. 1 **133** 1924 pp. 137–179.

264.—Miller, H. M. Studies on furcocercous Cercariae. I. *Cercaria douthitti* Cort and *Cercaria echinocauda* O'Roke. Trans. Amer. Microsc. Soc. Menasha Wis. **43** 1924 pp. 145–151 pl. vi.

265.—Miranda, C. Alguns Nematodeos do genero *Aplectana,* Railliet & Henry, 1916. (Quelques Nematodes du genre *Aplectana,* Railliet & Henry 1916). Mem. Inst. Oswaldo Cruz Rio de Janeiro **17** 1924 pp. 45–49 pls. ii–iv. (French translation pp. 51–54.)

266.—Mönnig, H. O. Life-histories of parasitic Nematodes. S. Afric. J. Nat. Hist. Pretoria **4** 1924 pp. 345–352.

267.—Mönnig, H. O. On some new South African parasitic Nematodes. Trans. R. Soc. S. Africa Cape Town **12** 1924 p. cxi. [*Vide* Zool. Rec. 1923 *Vermes* **222.**]

268.—Monard, A. La faune de la Motte. Lac de Neuchâtel. Rev. Hydrobiol. Aarau **2** 1922 pp. 150–187.

269.—Monro, C. C. A Serpulid Polychaete from the London docks (*Mercierella enigmatica* Fauvel). Ann. Mag. Nat. Hist. London ser. 9 **13** 1924 pp. 155–159.

270.—Monro, C. C. On the postlarval stage in *Diopatra cuprea* Bosc, a Polychaetous Annelid of the family *Eunicidae.* Ann. Mag. Nat. Hist. London ser. 9 **14** pp. 193–199.

271.—Monro, C. C. On the Polychaeta collected by H.M.S. "Alert," 1881–1882. Families *Polynoidae, Sigalionidae* and *Eunicidae.* J. Linn. Soc. Zool. London **36** 1924 pp. 37–64 24 text-figs.

272.—Monro, C. C. On the Polychaeta collected by H.M.S. "Alert," 1878–1882. Families *Aphroditidae* and *Amphinomidae.* J. Linn. Soc. Zool. London **36** 1924 pp. 65–77 7 text-figs.

273.—Monticelli, F. S. Descrizione del *Prostoma sebethis* Montic. Arch. Zool. Napoli **8** 1916 pp 401–423 pl. xvi.

274.—Morishita, K. O. A pig Nematode, *Gnathostoma hispidum,* Fedchenko, as a human parasite. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 23–26.

275.—Morishita, K. Notes on two new Monostomes with rudimentary ventral suckers. J. Parasitol. Urbana **10** 1924 pp. 158–164 pl. xx.

276.—Nanavutty, S. H. The existence of *Hymenolepis nana*-infection in India. Ind. J. Med. Research Calcutta **12** 1924 pp. 179 & 180.

277.—Nasonov, N. V. Contributions à la faune des Turbellaria de la Russie. Pts. I–IV. Bull. Acad. Sci. Petrograd ser. 6 **13** 1919 pp. 619–646 2 pls. 1039–1053 1 pl. and 1179–1197 1 pl.

278.—Naumann, E. Untersuchungen über einige gallertführende Tiere des Limnoplanktons. Ark. Zool. Stockholm **16** 1924 No. 24 pp. 1–12.

279.—Neveu-Lemaire, M. Présence d' *Ascaris ovis* chez le chevreuil (*Capreolus capreolus*). Ann. Parasitol. Paris **1** 1923 pp. 265–268.

280.—Neveu - Lemaire, M. Les Strongylidés du Rhinoceros africain (*Rhinoceros bicornis*). Ann. Parasitol. Paris **2** 1924 pp. 121–154 pls. ix–xx.

281.—Nevue-Lemaire, M. La femelle de *Khalilia rhinocerotis* Neveu-Lemaire, parasite du rhinocéros africain (*Rhinoceros bicornis*). Ann. Parasitol. Paris **2** 1924 pp. 224 & 225 pl. xxi.

282.—Nicoll, W. Remarks on the pathogenicity of common intestinal worms. Lancet London **1924** i pp. 174–176.

283.—Nicoll, W. A reference list of the Trematode parasites of British fresh-water fishes. Parasitol. Cambridge **16** 1924 pp. 127–144.

284.—Nicoll, W. A reference list of the Trematode parasites of British reptiles. Parasitol. Cambridge **16** 1924 pp. 329–331.

285.—Nitzulescu, V. Ueber das häufige Vorkommen des *Trichocephalus trichiurus* in Rumänien. Centralbl. Bakt. Jena Abt. 1 **92** Orig. pp. 542–546.

286.—Nitzulescu, V. Contribution à l'étude des anomalies du Bothriocéphale. Le Bothriocéphale d'apparence taenioide. C.R. Soc. Biol. Paris **91** 1924 pp. 771 & 772.

287.—Nuzum, M. F. and **Rand, H. W.** Can the pharyngeal epithelium of the earthworm produce central nervous tissue? Biol. Bull. Wood's Hole **47** 1924 pp. 213–222 1 pl.

288.—Nybelin, O. *Dactylogyrus vastator* n. sp. Ark. Zool. Stockholm **16** 1924 No. 28 pp. 1–2 3 text-figs.

289.—Nybelin, O. Zur postembryonalen Entwicklungsgeschichte der Acanthocephalen—II. Zool. Anz. Leipzig **61** 1924 pp. 190–193.

290.—Obermayer, H. Beiträge zur Kenntnis der Litoralfauna des Vierwaldstättersees. Rev. Hydrobiol. Aarau **2** 1922 pp. 3–111.

291.—Odhner, T. and **Woodland, W. N.** Remarks on *Sanguinicola*. Q. J. microsc. Sci. London **68** 1924 pp. 403–412.

Ogata, S. *vide* Yoshida, S.

Oordt, G. J. van *vide* Ihle, J. E.

292.—Palombi, A. Diagnosi di nuove specie di Policladi della R. N. "Liguria." Boll. Soc. nat. Napoli **35** 1923 pp. 33–37.

293.—Palombi, A. Le cercarie del genere *Gymnophallus* Odhner dei Mitili. Pubbl. Staz. zool. Napoli Milano **5** 1924 pp. 137–152 pl. vii.

294.—Palombi, A. Sulle Cercarie del genre *Gymnophallus* Odhner dei Mitili Rendic. Convegno Genova U. I. Z. **1923** pp. 21–23 (in Monit. Zool. Ital. Firenze **35** No. 11 1924).

295.—Pantin, C. F. Temperature and the viscosity of protoplasm. J. Mar. Biol. Ass. Plymouth **13** 1924 pp. 331–339.

296.—Pasquini, P. Le comportement du plancton dans les étangs à macération des environs de Bologne (Italie) et l'influence de la macération sur les organismes. Ann. biol. lacustre Bruxelles **13** 1924 pp. 69–73.

297.—Pawlowsky, E. N. und **Anitschkow, N. N.** *Tetracotyle sogdiana*—ein neuer Parasit von *Schizothorax intermedius* und ein Fall der von ihm bei seinem Wirte verursachter Peritonitis. [Russian, with German summary.] Russ. Hydrobiol. Zeits. Saratow **2** No. 11–12 1923 pp. 219–224.

297a.—*Pearse, A. S. The parasites of lake-fishes. Trans. Wisconsin Acad. sci. **21** 1924 pp. 161–194.

297b.—*Pearse, A. S. Observations on parasitic worms from Wisconsin fishes. Trans. Wisconsin Acad. Sci. **21** 1924 pp. 147–160 pls. i–iii.

298.—Penners, A. Experimentelle untersuchungen zum Determinationsproblem am Keim von *Tubifex rivulorum* Lam. I. Die Duplicitas cruciata und organbildende Keimbezirke. Arch. mikrosk. Anat. Entwick. Mech. Berlin **102** 1924 pp. 51–100.

299.—Penners, A. Ueber die Entwicklung teilweise abgetöteter Eier von *Tubifex rivulorum*. Verh. D. Zool. Ges. Berlin **29** 1924 pp. 69–73.

300.—Penners, A. Doppelbildungen bei *Tubifex rivulorum* Lam. Zool. Jahr. Jena Abt. allg. Zool. **41** 1924 pp. 91–120 16 text-figs.

301.—Pierantoni, U. Nuove osservazioni sulla luminescenza degli Oligocheti. Rendic Convegno Genova U. Z. I. **1923** pp. 16–18 (in Monitore Zool. Ital. Firenze **35** No. 11 1924).

302.—Poche, F. Die Entstehung der Rüssel der Tetrarhynchideen. Zool. Anz. Leipzig **59** 1924 pp. 100–104.

303.—Popoff, N. P. *Caryophyllaeus skrjabini* nov. sp., eine neue Cestode von *Abramis brama* [German, with Russian summary]. Russ. Hydrobiol. Zeits, Saratow **3** No. 11–12 1924 pp. 253–260.

304.—Porter, A. Some recent researches on *Cercariae* found in certain South African Gastropods. Trans. R. Soc. S. Africa Cape Town **12** 1924 p. lxi.

305.—Pratt, H. S. Preliminary Report of certain studies of the Trematodes of Tortugas. Carnegie Inst. Year Book Washington **23** 1924 pp. 198 and 199.

306.—Prenant, M. Notes anatomiques sur le développement de l'appareil circulatoire chez *Nereis dumerilii* Aud. et Edw. Bull. Soc. Zool. France Paris **48** 1924 pp. 340–344.

307.—Prenant, M. Topographie et développement des réseaux capillaires respiratoires chez quelques *Nereis*. Bull. Soc. Zool. France Paris **48** 1924 pp. 345–350.

308.—Prenant, A. *Andresia ampullifera* nov. g., nov. sp., de la sous-famille des Polynoiniens. Bull. Soc. zool. France Paris **49** 1924 pp. 19–29 7 text-figs.

309.—Prouty, W. F. and **Schwartz.** C. K. Systematic Paleontology of Silurian deposits—Vermes. Maryland geol. Survey Stratigraph. Mems. Baltimore (Silurian) **1923** pp. 402–403 pl. xi.

Rand, H. W. *vide* Nuzum, M. F.

310.—Ransom, B. H. Hookworms of the genus *Uncinaria* of the dog, fox and badger. Proc. U. S. Nat. Mus. Washington **65** Art. 20 1924 pp. 1–5 pl. i.

311.—Reisinger, E. *Dinophilus rostratus* Schulz: ein rhabdocoeles Turbellar. (Ein Beitrag zur Synonymik der *Alaurina composita* Metschnikow.) Zool. Anz. Leipzig **58** 1924 pp. 169 & 170.

312.—Reisinger, E. Die terricolen Rhabdocoelen Steiermarks. Zool. Anz. Leipzig **59** 1924 pp. 33–48 72–86 128–143.

313.—Reisinger, E. Zur Anatomie von *Hypotrichina* (= *Genostoma*) *tergestina* Cal. nebst einem Beitrag zur Systematik der Alloeocoelen. Zool. Anz. Leipzig **60** 1924 pp. 137–149.

314.—Reisinger, E. Zur Turbellarienfauna der Ostalpen. Neue und weing bekannte Vertreter der Graffilliden und Dalyelliden aus Steiermark und Kärnten. Zool. Jahrb. Jena Abt. Syst. **49** 1924 pp. 229–298 pl. i.

315.—Reisinger, E. Die Gattung *Rhynchoscolex*. Zs. Morph. Ökol. Tiere Berlin **1** 1924 pp. 1–37 pls. i & ii.

Reisinger, E. *vide* Steinboeck, O.

316.—Remans, A. Neue aberrante Gastrotrichen. I.—*Macrodasys buddenbrocki* nov. gen. nov. spec. Zool. Anz. Leipzig **61** 1924 pp. 289–297.

317.—Rensch, B. *Aphelenchus neglectus* **sp. n.,** eine neue parasitäre Nematodenart. Zool. Anz. Leipzig **59** 1924 pp. 277–280.

318.—Rensch, B. Zwei quantitative reizphysiologische Untersuchungsmethoden für Rübennematoden. Zs. wiss. zool. Leipzig **123** 1924 pp. 488–497.

Rifenburgh, S. A. *vide* Hyman, L. H.

319.—Riley, W. A. *Diphyllobothrium latum* in Minnesota. J. Parasitol. Urbana **10** pp. 188–190.

320.—Rioja, E. La *Mercierella enigmatica* Fauvel, serpulido de agua salobre, en Espana. Bol. Soc. Esp. Hist. nat. Madrid **24** 1924 pp. 160–169 pl. v.

321.—Robert, A. Remarques sur les *Convoluta*. Bull. Soc. Zool. France Paris **48** 1924 pp. 367–370.

322.—Ruppert, W. Empfindlichkeitsänderungen des Ascariseies auf verschiedenen Stadien der Entwicklung gegenüber der Einwirkung ultravioletter Strahlen. Zs. wiss. Zool. **123** 1924 pp. 103–155.

323.—Ruszkowski, J. Die postembryonale Entwicklung von *Hemistomum alatum* Dies. auf Grund experimenteller Untersuchungen. Bull. intern. Acad. Cracovie **1921 B** pp. 237–250.

324.—Sambon, L. W. The elucidation of cancer. J. trop. Med. London **27** 1924 pp. 124–174 many text-figs.

Saw, M. P. *vide* Meggitt, F. J.

325.—Schleip, W. Die Herkunft der Polarität des Eies von *Ascaris megalocephala.* Arch. mikroskop. Anat. Entwick. Mech. Berlin **100** 1924 pp. 573–598 17 text-figs.

326.—Schmidt, G. A. Nemertinen aus dem Wolgadelta. Russ. Hydrobiol. Zeits. Saratow. **2** No. 8–10 1923 pp. 178–180.

327.—Schmidt, G. A. Untersuchungen über die Embryologie der Anneliden. 2. Die Besonderheiten der Embryonalentwicklung der *Ichthyobdellidae* und ihre Entstehung. Zool. Jahrb. Jena Abt. Anat. **46** 1924 pp. 199–244 pls. iii & iv.

328.—Schmidt, L. Ueber eine durch Leberegel bedingte Seuche beim Meerschweinchen. Centralbl. Bakt. Jena Abt. 1 **91** 1924 Orig. pp. 315–317.

329.—Schneider, W. Zur Nematodenfauna der Salzquellen des norddeutschen Flachlandes. I. Nematoden der Salzquellen von Oldesloe (Holstein). Arch. Hydrobiol. Stuttgart **15** 1924 pp. 209–224.

330.—Schröder, O. Landplanarien von Neu-Caledonien und den Loyalty. Inseln. Nova Caledonia Berlin A. Zool. 3 L. ii pp. 257–298 pls. i–iii.

331.—Schwartz, B. A new proliferating larval tapeworm from a porcupine. Proc. U. S. Nat. Mus. Washington **66** art. 24 **1924** pp. 1–4 pl. i.

Schwartz, C. K. *vide* Prouty, W. F.

332.—Scriabine, K. J. Sur le genre *Metastrongylus* Molin, 1861. C.R. Soc. Biol. Paris **90** 1924 pp. 1215 & 1216.

Scriabine, K. J. *vide etiam* Skrjabin, K. I.

333.—Scriban, I. A. Sur la structure et la cytophysiologie de la cellule adipeuse chez *Glossosiphonia paludosa* C. C.R. Soc. Biol. Paris **90** 1924 pp. 1065–1067 1 text-figs.

334.—Searight, W. V. Fossil Annelid jaws from the Iowa Devonian. Proc. Iowa Acad. Sci. Des Moines **30** 1923 pp. 433–440 pl. i.

335.—Seidenschwarz, L. Jahreszyklus freilebender Erdnematoden einer Tiroler Alpenwiese. Arb. zool. Inst. Univ. Innsbruck **1** 1923 pp. 33–71 29 text-figs.

336.—Sekera, E. Eine Erklärung zur Fauna terricola bei den Süsswasserturbellarien. Zool. Anz. Leipzig **60** 1924 pp. 327–333.

337.—Sharp, N. D. Schistosomiasis in Nigeria. J. trop. Med. London **27** 1924 p. 247.

338. Shearer, C. On the oxygen-consumption rate of parts of the chick embryo and fragments of the earthworm. Proc. Roy. Soc. London **B 96** 1924 pp. 146–156.

339.—Shearer, E. M. The experimental reversal of polarity in *Planaria.* Science New York N. S. **60** 1924 pp. 295 & 296.

340.—Sherborn, C. D. Index Animalium 1801–1850 Parts IV & V. London (British Museum Trustees) **1924** pp. 641–943 944–1196.

341.—Shipley, A. E. Some ancient worthies in Parasitology. J. Parasitol. Urbana **10** 1924 pp. 182–187.

342.—Skrjabin, K. I. *Philometra rischta* mihi, eine interessante Fischfilaria aus Sibirien. Russ. Hydrobiol. Zeits. Saratow **2** No. 11–12 1923 pp. 236–240.

343.—Skrjabin, K. I. (Über die Parasitenfauna (Vermes) aus Sterlets im Wolga bassin.) [Russian, with German summary.] Russ. Hydrobiol. Zeits. Saratow **3** No. 3–5 1924 pp. 60–68.

Skrjabin, K. I. *vide etiam* Scriabine, K. J.

344.—Skwarra, E. Ergänzung zur Kenntnis eines freilebenden Nematoden, *Monohystera bipunctata* G. Schneider. Arch. Hydrobiol. Stuttgart **15** 1924 pp. 225 & 226.

345.—Skwarra, E. Freilebende Nematoden Ostpreussens. Schr. physik.-ökonom. Ges. Königsberg **63** 1922 pp. 107–112. [*Vide etiam* Zool. Rec. 1922 No. **337.**]

346.—Skwarra, E. Neuere Forschungen über freilebende Nematoden. Schr. physik.-ökonom. Ges. Königsberg **64** 1924 pp. 62 & 63.

347.—Skwortzoff, A. H. Materialen zur Fauna der Larvenformen von in Molluska der Wolga und Wetluga lebenden Trematoden. [Russian, with German translation.] Arb. Biol. Wolga-Station Saratow **7** No. 4–5 1924 pp. 201–211.

348.—Smith, F. The calciferous glands of *Lumbricidae* and *Diplocardia*. Illinois Biol. Monogr. **9** 1924 No. 1 pp. 1–76 12 pls.

349.—Smith, F. A new earthworm from Texas belonging to the genus *Diplocardia*. Proc. U. S. Nat. Mus. Washington **66** Art. 12 pp. 1–6.

350.—Solowiew, M. M. Ueber die Rolle der *Tubifex tubifex* in der Schlammerzeugung. Intern. Rev. Hydrobiol. Leipzig **12** 1924 pp. 90–101 Tflblg. viii.

351.—Soparkar, M. B. A new *Cercaria* from Northern India. *Cercaria patialensis* nov. spec. Ind. J. med. Res. Calcutta **11** 1924 pp. 933–941 pl. lxii.

352.—Southwell, T. The pearl-inducing worm in the Ceylon pearl oyster. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 37–53.

353.—Southwell, T. Notes on certain Cestodes in the School of Tropical Medicine, Liverpool. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 177–182.

354.—Southwell, T. Notes on some Tetrarhynchid parasites from Ceylon marine fishes. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 459–491.

355.—Southwell, T. and **Adler,** S. *Ophiotaenia marenzelleri. Zschokkeella guinensis.* Tetrarhynchid larva. Ann. trop. Med. Parasitol. Liverpool **18** 1924 p. 129. [Mention of new hosts only.]

356.—Spemann, F. W. Ueber Lebensdauer, Altern und andere Fragen der Rotatorien-Biologie. Nach Beobachtungen an *Rotifer vulgaris*. Zs. wiss. Zool. Leipzig **123** 1924 pp. 1–36 12 text-figs.

357.—Stankovitch, S. À propos de la présence de *Polycelis cornuta* Johnson en Serbie orientale et en Bulgarie. C.R. Soc. Biol. Paris **91** 1924 pp. 805–807.

358.—Stauffer, H. Die Lokomotion der Nematoden. Beiträge zur Kausalmorphologie der Fadenwürmer. Zool. Jahr. Jena Abt. Syst. **49** 1924 pp. 1–118 26 text-figs.

359.—Stauffer, H. Zur Kenntnis der Nematodengattung *Rhabdogaster*. Zool. Jahrb. Jena Abt. Syst. **49** 1924 pp. 119–130 7 text-figs.

360.—Stefanksi, W. Freilebende Nematoden aus Polen. II. Teil. Bull. intern. Acad. Cracovie **1916 B** pp. 173–178 pl. ix.

361.—Steinböck, L. Untersuchungen uber die Geschlechtstrakt-Darmverbindung bei Turbellarien, etc., nebst einem Beitrag zur Morphologie des Tricladendarmes. Zeits. Morph. Ökol. Tiere Berlin **2** 1924 pp. 461–504 21 text-figs.

362.—Steinböck, O. Eine neue Gruppe allöocöler Turbellarien: Alloeocoela typhlocoela. (Familie *Prorhynchidae.*) Zool. Anz. Leipzig **58** 1924 pp. 233–242.

363.—Steinböck, O. Die Bedeutung der *Hofstenia atroviridis* Bock für die Stellung der Alloeocoela im System der Turbellarien. Zool. Anz. Leipzig **59** 1924 pp. 156–166.

364.—Steinboeck, O. and **Reisinger,** E. On *Prorhynchus putealis* Haswell, with a description of a new species of the genus. Q. J. microsc. Sci. London **68** 1924 pp. 443–451 4 text-figs.

365.—Steinecke, F. Die Rotatorienfauna von Ostpreussen. Schr. physik.-ökonom. Ges. Königsberg **64** 1924 pp. 29–52.

366.—Steiner, G. Some Nemas from the alimentary tract of the Carolina tree frog (*Hyla carolinensis*, Pennant.). With a discussion of some general problems of nematology. J. Parasitol. Urbana **11** 1924 pp. 1–32 pls. i–xi.

367.—Steiner, G. A remarkable new genus and species of Mermithid worms from Jamaica. Proc. U. S. Nat. Mus. **65** Art. 14 pp. 1–4 pls. i & ii.

368.—Stephenson, J. On the blood-glands of earthworms of the genus *Pheretima.* Proc. Roy. Soc. London **B97** 1924 pp. 177–209 pls. viii & ix.

369.—Stephenson, J. On a new species of the genus *Perionyx* (Oligochaeta) from Tasmania. Ann. Mag. Nat. Hist. London ser. 9 **14** 1924 pp. 546 & 547.

370.—Stephenson, J. On some Oligochaete worms from Spitzbergen. Results of the Merton College Expedition to Spitzbergen, 1923.—No. 3. Ann. Mag. Nat. Hist. Lond. ser. 9 **13** pp. 210–216.

371.—Stephenson, J. Oligochaeta of the Siju Cave, Garo Hills, Assam. Rec. Ind. Mus. Calcutta **26** 1924 pp. 127–136 pl. vi.

372.—Stephenson J. On some Indian Oligochaeta, with a description of two new genera of *Ocnerodrilinae.* Rec. Ind. Mus. Calcutta **26** 1924 pp. 317–365 pls. xxi–xxiii.

373.—Stiles, C. W. Possible solutions of the present concurrent use of generic names *sensu lato* and *sensu stricto,* example *Ascaris.* J. Parasitol. Urbana **11** 1924 pp. 94–96.

374.—Stiles, C. W. and **Brown, G.** Nomenclature of the Nematode genera *Belascaris* 1907, *Toxascaris* 1907 and *Toxocara* 1905. J. Parasitol. Urbana **11** 1924 pp. 92 & 93.

375.—Stiles, C. W. and **Brown, G.** The type-species of *Monodontus* Molin (1861a). J. Parasitol. Urbana **11** 1924 pp. 96 & 97.

376.—Stolte H. A. Altersveränderungen bei limocolen Oligochäten. Verh. D. zool. Ges. Berlin **29** 1924 pp. 43–46.

377.—Storch, O. Die Eizellen der heterogonen Rädertiere. Nebst allgemeinen Erörterungen über die Cytologie des Sexualvorganges und der Parthenogenese. Zool. Jahrb. Jena Abt. Anat. **45** 1924 pp. 309–404 pls. xv–xviii.

Storrow, B. *vide* Meek, A.

378.—Strom, J. Ein neuer Parasit des Haushuhns, *Plagiorchis arcuatus.* Zool. Anz. Leipzig **60** 1924 pp. 274–280.

379.—Stunkard, H. W. A new Trematode, *Oculotrema hippopotami* n.g., n. sp. from the eye of the hippopotamus. Parasitol. Cambridge **16** 1924 pp. 436–440 pl. xvi.

380.—Stunkard, H. W. On some Trematodes from Florida turtles. Trans. Amer. Microsc. Soc. Menasha Wis. **43** 1924 pp. 97–117 2 pls.

381.—Svetlov, P. G. (Sur la reproduction sexuelle dans la famille des [*Naididae.*) Russ. hydrobiol. Zeits Saratow **2** Nos. 8–10 1923 pp. 163–167. Russian, with French summary.]

382.—Szidat, L. Beiträge zur Entwicklungsgeschichte der Holostomiden. Zool. Anz. Leipzig **58** 1924 pp. 299–314.

383.—Szidat, L. Beiträge zur Entwicklungsgeschichte der Holostomiden. Zool. Anz. Leipzig **61** 1924 pp. 249–266 12 text-figs.

384.—Taylor, E. L. On the Ascarids of the dog and cat. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 243–251.

385.—Taylor, E. L. Notes on some Nematodes in the Museum of the Liverpool School of Tropical Medicine. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 601–618.

386.—Teodoro, G. Su una forma di *Sparganum* rinvenuta in un *Hamadryas hamadryas* L. Arch. zool. ital. Napoli **9** 1917 pp. 159–163.

387.—Terni, C. Note di Elmintologia. I-III. Rendic Convegno Genova U. Z. I. **1923** pp. 49–54 pls. i & ii (in Monit. Zool. Ital. Firenze **35** No. 11 1924).

388.—Theiler, G. On the anatomy of *Taenia festiva* Rudolphi 1819. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 3–13.

389.—Theiler, G. On the classification of the Cestode genus *Moniezia* (Blanchard, 1891). Ann. trop. Med. Parasitol. Liverpool **19** 1924 pp. 109–123.

390.—Theiler, A. On a Nematode of fowls having a Termite as an intermediate host. Trans. R. Soc. S. Africa Cape Town **12** 1924 p. xlii.

391.—Theiler, G. Two new species of Nematodes from the zebra. Trans. R. Soc. S. Africa Cape Town **12** 1924 p. cxxxi. [*Vide* Zool. Rec. 1923 *Vermes* **306.**]

392.—Thiroux, A. Sur un procédé destiné à empêcher l'infestation du sol par les larves d'Ankylostomes dans les pays chauds. Bull. Soc. Path. exot. Paris **17** 1924 pp. 303–306.

393.—Thomas, L. J. Studies on the life-history of *Trichosomoides crassicauda* (Bellingham). J. Parasitol. Urbana **10** 1924 pp. 105–136 pls. xiv–xviii.

394.—Thompson, M. The soil population. An investigation of the biology of the soil in certain districts of Aberystwyth. Ann. Appl. Biol. Cambridge **11** 1924 pp. 349–394.

Thompson, M. G. *vide* Blacklock, D. B.

395.—Thorne, G. Utah Nemas of the genus *Mononchus.* Trans. Amer. Microsc. Soc. Menasha Wis. **43** 1924 pp. 157–171 pls. vi–viii.

396.—Thornton, H. A review of the Oesophagostomes in the Collection of the Liverpool School of Tropical Medicine. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 393–408.

397.—Thornton, H. The relationship etween the Ascarids of Man, pig and chimpanzee. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 99 & 100.

398.—Torres, C. de M. Habronèmose pulmonaire (*Habronema muscae* Carter) expérimentalement reproduite chez le cobaye. C.R. Soc. Biol. Paris **90** 1924 pp. 242 & 243.

399.—Travassos, L. *Verdunia tricoronata* identifié au *Balanorchis anastrophus.* C.R. Soc. Biol. Paris **90** 1924 p. 56.

400.—Travassos, L. *Sebekia* du poumon des crocodiles d'Amérique. C.R. Soc. Biol. Paris **90** 1924 pp. 239 & 240.

401.—Travassos, L. Nouvelle espèce de *Prohemistomum.* C.R. Soc. biol. Paris **91** 1924 pp. 835–838.

402.—Treadwell, A. L. A new marine Annelid from Chile. Proc. U. S. Nat. Mus. Washington **65** Art. 23 pp. 1–3 4 text-figs.

403.—Tubangui, M. A. Two larval parasites from the Philippine palm civet (*Paradoxurus philippinensis*). Philippine J. Sci. Manila **24** 1924 pp. 749–755.

404.—Twenhofel, W. H. The geology and Invertebrate paleontology of the Comanchean and "Dakota" formations of Kansas. Bull. State Geol. Surv. Kansas **9** 1924 pp. 1–135 23 pls.

405.—Ude, H. Neue *Pheretima*-Arten von Neu-Guinea. Zool. Anz. Leipzig **61** 1924 pp. 80–85.

405a.—*Van Cleave, H. J. A critical study of the Acanthocephala described and identified by Joseph Leidy. Proc. Acad. Nat. Sci. Philadelphia **76** 1924 pp. 279–334 pls. xvi–xviii.

406.—Viana, L. Tentativa de catalogacao das especies brazileiras de Trematodeos. Mem. Inst. Oswaldo Cruz Rio de Janeiro **17** 1924 pp. 95–227.

407.—Walker, M. J. Some observations on the transmission of *Filaria bancrofti* in Queensland. Austral. Journ. exp. Biol. med. Sci. Adelaide **1** 1924 pp. 39–45.

408.—Walton, A. C. The chromosome-cycle in Nematodes. A preliminary Report. Trans. Amer. Microsc. Soc. Menasha Wis. **43** 1924 pp. 1–10.

409.—Ward, H. B. A misleading designation. Science New York N.S. **60** 1924 pp. 498 & 499.

410.—Westblad, E. Zur Kenntnis der vitalen Alizarinfärbung. Zool. Anz. Leipzig **61** 1924 pp. 86–98 9 text-figs.

411.—Wilckens, O. Die tertiäre Fauna der Cockburn Insel (Westantarktika). Further zool. Res. Swedish Antarct. Exped. 1901–1903 (Otto Nordenskjöld) Stockholm **1** no. 5 1924 pp. 1–18 1 pl.

412.—Wilckens, O. *Lahillia* and some other fossils from the Upper Senonian of New Zealand. Trans. Proc. N. Zealand Inst. Wellington **55** 1924 pp. 539–544 pl. liv.

413.—Wilczynski, J. Ueber die Exkretionsvorgänge bei den Männchen von *Bonellia viridis* Rol. Bull. intern. Acad. Cracovie **1914 B** pp. 191–196.

414.—Wilczynski, J. *Amblyplana tetracladea*, a new species of land Planarians from Central Africa. Bull. intern. Acad. Cracovie **1922 B** (1923) pp. 255–280 pl. xiii.

Willier, B. H. *vide* Hyman, L. H.

415.—Woltereck, R. Bemerkung zur katastrophalen Metamorphose der *Polygordius*-Endolarve. Zool. Anz. Leipzig **69** 1924 pp. 290–292.

416.—Woodland, W. N. *Hymenolepis nana* and *H. fraterna*. Nature London **113** 1924 p. 675; also Lancet London **1924** i p. 922.

417.—Woodland, W. N. On the life-cycle of *Hymenolepis fraterna* (*H. nana* var. *fraterna* Stiles) of the white mouse. Parasitol. Cambridge **16** 1924 pp. 69–83.

418.—Woodland, W. N. On the development of the human *Hymenolepis nana* (Siebold 1852) in the white mouse, with remarks on "*H. fraterna*," "*H. longior*" and "*H. diminuta*. Parasitol. Cambridge **16** 1924 pp. 424–435.

419.—Woodland, W. N. On a new *Bothriocephalus* and a new genus of *Proteocephalidae* from Indian fresh-water fishes. Parasitol. Cambridge **16** 1924 pp. 441–451 pl. xvii.

420.—Wunder, W. Bau, Entwicklung und Funktion des Cercarienschwanzes. Zool. Jahrb. Jena Abt. Anat. **46** 1924 pp. 303–342 19 text-figs.

421.—Yokoyama, M. Tertiary. Fossils from Kii. Japan J. Geol. Geogr. Tokyo **2** 1923 pp. 47–58 pls. vi & vii.

422.—Yoshida, S. & Ogata, S. Two rare specimens of human Cestodes. Ann. trop. Med. Parasitol. Liverpool **18** 1924 pp. 15–22 pl. i.

423.—Zandt, F. Fischparasiten des Bodensees. Centralbl. Bakt. Jena Abt. 1 **92** 1924 Orig. pp. 225–271 33 text-figs.

424.—Zirpolo, G. Sulla presenza di organi simbiotici nell'*Hirudo medicinalis* L. Boll. Soc. nat. Napoli **34** 1923 pp. 12 & 13.

PLATYHELMINTHIA, NEMERTINEA, MESOZOA.

SUBJECT INDEX.

COMPREHENSIVE AND GENERAL.

Nomenclature.—Ward, **409.**

Biographical.—Baylis, **25**; Shipley, **341.**

Addresses, Reviews.—Ashworth, **11**; Cawston, **51**; Dollfus, **95.**

Treatises.—Graff, **146.**

Museum Collections.—Southwell, **353.**

Economics. — *Relation to disease*: Day, **87**; Hegner, **164**; Marjoribanks & Le Sueur, **237**; Schmidt, **328**; Southwell, **352.**

Miscellaneous. — *Experimental infection*: Cawston, **53**; Woodland, **417** & **418.** *Technique*: Hyman, **173**; Westblad, **410.**

STRUCTURE.

General Morphology. — *Turbellaria*: Bock, **43**; Cognetti de Martiis, **76**; Haswell, **161**; Reisinger, **312–315**; Schröder, **330**; Steinböck, **361–363**; Steinboeck & Reisinger, **364.** *Trematoda*: Baer, **16**; Bhalerao, **36**; Dollfus, **99**; Langeron, **215**; Morishita, **275**; Odhner & Woodland, **291**; Soparkar, **351**; Strom, **378**; Stunkard, **379** & **380**; Travassos, **401**; Wunder, **420.** *Cestoda*: Basso, **19**; Fuhrmann, **136**; Johnston, **183**; Poche, **302**; Popoff, **303**; Theiler, **338** & **389**; Woodland, **419**; Yoshida & Ogata, **422.** *Nemertinea*: Monticelli, **273**; Schmidt, **326.**

Alimentary System.—Steinböck, **361.**

Histology.—Poche, **302**; Westblad **410.**

Sexual organs and cells.—Basso, **19**; Meixner, **252**; Steinböck, **361.**

PHYSIOLOGY.

General.—Goetsch, **142.**

Metabolism, Excretion.—Drzewina & Bohn, **101**; Hyman, Willier & Rifenburgh, **174**; Jacek, **180.**

Respiration.—Hyman, Willier & Rifenburgh, **174.**

Movements.—Robert, **321.**

Regeneration, Restitution, de-differentiation.—Dawydoff, **85** & **86**; Keil, **188**; Shearer, **338.**

Sexual Processes.—Budington, **48**; Gelei, **139.**

Environmental Effects; Response to stimuli.—Drzewina & Bohn, **101**; Fredericq, **127**; Goetsch, **142**; Goldsmith, **144**; Szidat, **383.**

Effects of Reagents, etc.—Bettencourt, **35**; Drzewina & Bohn, **102**; Hinrichs, **169.**

REPRODUCTION AND DEVELOPMENT.

General, Life-cycle. — *Turbellaria* Beauchamp, **31.** *Trematoda*: Faust, **116**; Matthias, **239–241**; Porter, **304.** *Cestoda*: Braun, **45**; Joyeux, **185**; Meggitt, **246**; Woodland, **417** & **418.**

Asexual Reproduction.—Fredericq, **127**; Meggitt, **245.**

Regeneration.—Keil, **188.**

Gametogenesis.—Beauchamp, **31**; Meixner, **251.**

Embryogeny, Development. — Fulinski, **137**; Meixner, **251**; Woodland **418.**

Larval Forms. — Blacklock & Thompson, **39**; Ciurea, **67**; Dollfus, **96**; Langeron, **215**; Lutz, **225**; Miller, **264**; Palombi, **293** & **294**; Ruszkowski, **323**; Szidat, **382** & **383**; Tubangui, **403**; Wunder, **420.**

ETHOLOGY.

Bionomics; Habits.—Faust, **112**; Goldsmith, **144**; Harnisch, **158**; Kepner & Barker, **189**; Reisinger, **315**; Robert, **321**; Sekera, **336**; Southwell, **352.**

Parasitism. — *Transmission, infectivity*:—Jenkins, **182**; Khalil, **190**; Szidat, **382**; Woodland, **417.** *Relation to host's tissues*: Agersborg, **5**; Faust, **112**; Khouri, **191**; Langeron, **215.**

Parasitism: Hosts. — *Crustacea* Dollfus, **95**; Mathias, **239.** *Mollusca*: Blacklock & Thompson, **39**; Cawston, **49–54**; Ingram, **176**; Lutz, **225**; Mathias, **240**; Porter, **304**; Skwortzoff, **347**; Soparkar, **351**; Szidat, **382.** *Pisces*: Annenkova-Chlopina, **8** & **9**; Johnston, **183**; Joyeux, **184**; Khalil, **190**; Lewaschoff, **222**; Linton, **223**; Nicoll, **283**; Popoff, **303**; Skrjabin, **343**; Travassos, **401**; Woodland, **419**; Zandt, **423.** *Amphibia*: Grobbelaar, **153**; Meggitt, **245.** *Reptilia*: Baer, **16**; Baylis & Cannon, **27**; Dollfus, **99**; Fuhrmann, **135**; Magrath, **231**; Nicoll, **284**; Stunkard, **380.** *Aves*: Ciurea, **67**; Faust, **113**; Isaitchikow, **177**; Joyeux, **186**; Lutz, **225**; Mathias, **240**; Meggitt, **248**; Meggitt & Saw, **249**; Morishita, **275**; Strom, **378.** *Mammalia*: Baer, **15**; Bhalerao, **36**; Brumpt & Joyeux, **46**; Ciurea, **67**; Isobé, **178**; Joyeux & Alleaux, **187**; Meggitt, **247**; Stunkard, **379**; Teodoro, **386**; Tubangui, **403.**

VARIATION, PHYLOGENY.

Variation.—Isaitchikow, **177.**

Abnormalities.—Nitzulescu, **286**; Yoshida & Ogata, **422.**

Classification, Phylogeny.—Baer, **16**; Meixner, **252**; Reisinger, **313**; Southwell, **354**; Steinböck, **363**; Theiler, **389.**

DISTRIBUTION (GEOGRAPHY).

[*Vide etiam* "Parasitism."]

Geographical.—*General*: Arndt, **10.** *Europe*: Beklemichev, **32** & **33**; Labbé, **211**; Monard, **268**; Nasonov, **277**; Reisinger, **312** & **314**; Schmidt, **326**; Stankovitch, **357.** *Asia*: Bernard, Bablet & Pons, **34**; Cullen, **83**; Faust, **110**; Nanavutty, **276.** *Africa*: Mazza, **243**; Sharp, **337**; Wilczynski, **414.** *Australasia*: Schröder, **330.** *America*: Cram, **82**; Riley, **319.** *Atlantic*: Dollfus, **97.** *Pacific*: Palombi, **292.**

SYSTEMATIC.

Platyhelminthia.

Platyhelminthia (Trematoda and Cestoda) from fishes, Lake Constance, notes; Zandt Centralbl. Bakt. Abt. 1 **92** Orig. pp. 227–246 14 text-figs.

(*a*) Turbellaria.

Turbellaria, E. Russia, faunistic & systematic; Beklemisev Bull. Acad. Sci. Russ. ser. 6 **15** pp. 631–656 3 pls.

Turbellaria, Russia, notes; Nasonov Bull. Acad. Sci. Petrograd ser. 6 **13** pp. 619–646 2 pls. [In Russian.]

Turbellaria from E. Alpine districts (Steiermark, etc.), with new forms; Reisinger Zool. Jahrb. Syst. **49** pp. 229–298 pl. i.

Rhabdocoela (*Kalyptorhynchia*), studies on; Meixner Zool. Anz. **60** pp. 89–105, 113–125, 20 text-figs.

Rhabdocoelida from Steiermark, with new forms; Reisinger Zool. Anz. **59** pp. 33–48, 72–86, 128–143.

Land Planarians from New Caledonia with new forms; Schröder Nova Caledonia A. Zool. **3** L. ii pp. 257–298 pls. i–iii.

Acanthopharyngidae **fam. n.**; Reisinger Zool. Anz. **59** p. 139.

Acanthopharynx **gen. n.** (*Acanthopharyngidae*) *arcanus* **sp. n.** p. 139; Reisinger T.c.

Acrochordonoposthia **gen. n.** (*Typhloplanidae*) *conica* p. 75, *ophiocephala*, *reversa* p. 77, *apopera* p. 78, *nemoralis* p. 79, **spp. n.**, Steiermark; Reisinger T.c.

Adenocerca **gen. n.** (*Typhloplanidae*) *bresslaui* p. 45, *clinopharynx* p. 46, **spp. n.**, Graz; Reisinger T.c.

Adenoplea **gen. n.** (*Typhloplanidae*) *inermis* p. 82, *perigraptopera* p. 84, *pinquis* p. 128, *armata* p. 130, *paraproxenetes* p. 132 **spp. n.** Steiermark; Reisinger T.c.

Alaurina composita Metsch., *vide Dinophilus* (Archiannelida).

Alloeocoela typhlocoela (Fam. *Prorhynchidae*), a new group of Turbellaria; Steinböck Zool. Anz. **58** pp. 233–242.

Amblyplana **gen. n.** (*Rhynchodemidae*) *tetracladea* **sp. n.**, from Central Africa; Wilczynski Bull. Acad. Cracovie **1922 B** pp. 255–280 pl. xiii.

Amphibolella **gen. n.** (*Typhloplanidae*) *segnis* **sp. n.**, p. 25; Findenegg Zool. Anz. **61**.

Anoplorhynchus **gen. n.** (*Polycystididae*), *piger* **sp. n.** pp. 89, 122; Meixner Zool. Anz. **60**.

Archivortex **gen. n.** (*Graffillidae*) *silvestris* **sp. n.**; Reisinger Zool. Anz. **59** p. 35.

Ascophora **gen. n.** (*Typhloplanidae*) *elegantissima* p. 21, *paradoxa* p. 23 **spp. n.**; Findenegg Zool. Anz. **61**.

Bockia **gen. n.** (*Typhloplanidae*) *deses* **sp. n.** Graz, p. 80; Reisinger Zool. Anz. **59**.

Bothomesostoma truncatum **sp. n.**, E. Russia; Beklemisev Bull. Acad. Sci. Russ. ser. 6 **15** p. 639 figs. 5–7, 11.

Castrada andreja p. 638 pl. ii figs. 7–10, *orloviensis* p. 639 pl. iii fig. 7 **spp. n.**; Nasonov Bull. Acad. Sci. ser. 6 **13**.—*C. nigropontica* **sp. n.** p. 1044 figs. 4–7; Id. T.c.—*C. vernalis* **sp. n.** p. 651 figs. 21, 22; Beklemisev *op. cit.* ser. 6 **15**.

Catenula pygmaea sp. n.; Reisinger Zool. Anz. **59** p. 34.

Chorizogynopora **gen. n.** (*Typhloplanidae*) *paradoxa* **sp. n.**; Reisinger T.c. p. 43.

Coelogynopora **gen. n.** (*Alloeocoela, Otoplanidae* prov.) *bresslaui* p. 462, *biarmata*, *gynocotyla* p. 463 **spp. n.** connection between alimentary canal & sexual apparatus; Steinböck Zs. Morph.-Ökol. Tiere **2** pp. 461–504 21 text-figs.

Cryptocelides samoensis **sp. n.** Pacific; Palombi Boll. Soc. Nat. Napoli **35** p. 32.

Dalyellia styriaca p. 237 figs. 1, 4–11, *cetica* p. 274 fig. 12, *lugubris* p. 281 fig. 14, Steiermark, **spp. n.**; Reisinger Zool. Jahrb. Syst. **49**.—*D. chlynovica* p. 628 pl. ii figs. 7–10, *polychaeta* p. 629 pl. i fig: 2, **spp. n.**, *D. fusca* **subsp. n.** *filifera* p. 631 pl. i fig. 14, *virgulifer* **subsp. n.** *vjatkensis* p. 632 pl. i figs. 11–13; Nasonov Bull. Acad. Sci. Petrograd ser. 6 **13**.—*D. rubra* **subsp. n.** *caucasica*; Nasonov

T.c. p. 1040 pl. iv fig. 9.—*D. r.* **subsp. n.** *frankia* p. 1187 pl. v figs. 4, 5, *D. fairchildi* **subsp. n.** *synchaeta* p. 1189 figs. 1–3, *D. zykovi* **nom. nov.** p. 1188; ID. T.c.—*D. brevimana* p. 647 fig. 19, *nanella* p. 649 fig. 17, **spp. n.**; BEKLEMISEV *op. cit.* **6** 15.

Euryleptides **gen. n.** *brasiliensis* **sp. n.** Atlantic Ocean; PALOMBI Boll. Soc. Nat. Napoli **35** p. 37.

Geoplana sarasiniana p. 263 fig. 1a–e, *rouxiana* fig. 2a–d, *semoniana* fig. 3a–b, p. 264, *zebra* p. 265 fig. 4a–c, *gregoryana* p. 266 fig. 14a–c, *austiniana* p. 267 fig. 15a–c, *cookiana* p. 269 fig. 8a–p, *forsterorum* p. 270 fig. 9a–h, *chamissoniana* p. 273 fig. 11a–g, *eschscholtziana* p. 274 fig. 13a–e, *leichhardtiana* fig. 5a–e, *dietrichiana* fig. 6a–c, p. 275, *milleriana* p. 276 fig. 16a–b, **spp. n.**, New Caledonia; SCHRÖDER Nova Caledonia A. Zool. **3** L. ii.

Haplovortex **gen. n.** (*Graffillidae*) *bryophilus* **sp. n.** p. 232 figs. 2 & 3; REISINGER Zool. Jahrb. Syst. **49.**

Hoplopera **gen. n.** (*Typhloplanidae*) p. 46, *opaca* p. 47, *maculata* p. 72, *macropharynx* p. 74 **spp. n.** Graz; REISINGER Zool. Anz. **59.**

Hypotrichina (= *Genostoma*) *tergestina* Cal., and the systematic of the Alloeocoela; MEIXNER Zool. Anz. **60** pp. 137–149 2 text-figs.

Koinocystis **gen. n.** (*Polycystididae*) for *K.* (*Acrorhynchus*) *sophiae* (Graff) & *neocomensis* (Fuhrm.); MEIXNER T.c. pp. 89, 122.

Krumbachia **gen. n.** (*Typhloplanidae*) *styriaca* **sp. n.** Graz, p. 41; REISINGER *op. cit.* **59.**

Macrophysaliophora **gen. n.** (*Typhloplanidae*) *inconstans* **sp. n.** p. 136, Graz; REISINGER T.c.

Metaposthia **gen. n.** *norfolkensis* **sp. n.** Pacific (Tasmanian Sea); PALOMBI Boll. Soc. nat. Napoli **35** p. 35.

Notoplana parvula **sp. n.**, Borneo; PALOMBI T.c. p. 37.

Olisthanella elegans **sp. n.**, p. 636; *O. palmeni* Nas. **subsp. n.** *rhynchocephala* p. 635 fig. 3; NASONOW Bull. Acad. Sci. Petrograd ser. 6 **13.**

Olisthanellinella **gen. n.** (*Typhloplanidae*) p. 37, *rotundata* **sp. n.** p. 38; REISINGER Zool. Anz. **59.**

Opistomum dimitrii **sp. n.** p. 641 pl. ii figs. 1, 2; NASONOV Bull. Acad. Sci. Petrograd ser. 6 **13.**

Pelmatoplana kotzebueana **sp. n.**; SCHRÖDER Nova Caledonia A Zool. **3** L. ii p. 277 fig. 12a–e.

Perandropora **gen. n.** (*Typhloplanidae*) *macroposthia* **sp. n.**, Graz; REISINGER Zool. Anz. **59** p. 39.

Phoenocora jucunda Cogn., general account; COGNETTI DE MARTIIS Arch. Zool. Napoli **8** 1916 pp. 189–247 pls. xi & xii.—*P. vjatkensis* **sp. n.**; NASONOW Bull. Acad. Sci. Petrograd ser. 6 **13** p. 633 pl. i figs. 11–13.—*P. achaeorum* **sp. n.** p. 1043 pl. iv figs. 1–3; ID. T.c.

Polycystis tenuis **sp. n.**; BEKLEMISEV Bull. Acad. Sci. Russ. ser. 6 **15** p. 653 figs. 23–25.

Polyposthides **gen. n.** *karimatensis* p. 34, *affinis*, *caraibica* p. 35, **spp. n.** Pacific; PALOMBI Boll. Soc. nat. Napoli **35.**

Prorhynchus hastatus, *alpinus* **spp. n.**, p. 234 *et seq.*; STEINBÖCK Zool. Anz. **58.**—*P. putealis* Hasw. morphology pp. 443–449, 4 text-figs., *P. haswelli* **sp. n.**, note p. 450; STEINBÖCK & REISINGER Q. J. Microsc. Sci. **68.**

Protoplanella **gen. n.** (*Typhloplanidae*) p. 36 *simplex* **sp. n.** p. 37, Graz; REISINGER Zool. Anz. **59.**

Rhynchodemus waburtonianus [meant for *warburtonianus* ?] fig. 17a–b, *lindsayianus* fig. 18, p. 278, *forrestianus* fig 19a–c, *mitchellianus* fig. 20a–c, p. 279 **spp. n.**, New Caledonia; SCHRÖDER Nova Caledonia A. Zool. **3** L. ii.

Rhynchoscolex, description of genus & species, systematic position; REISINGER Zs. Morph. Ökol. Tiere **1** pp. 1–37 pls. i & ii.—*R. diplolithicus* **sp. n.**, Graz; REISINGER Zool. Anz. **59** p. 35.

Stenostomium perforatum **sp. n.** p. 632, fig. 1; BEKLEMISEV Bull. Acad. Sci. Russ. ser. 6 **15.**

Stylochoplana pusilla **sp. n.**, Japan, general description; BOCK Ark. Zool. **16** No. 17 pp. 1–24 1 pl.—*S. siamensis*, *caraibica* **spp. n.** Pacific; PALOMBI Boll. Soc. Nat. Napoli **35** p. 36.

Styloplanella **gen. n.** (*Typhloplanidae*) *strongylostomoides* **sp. n.** p. 27; FINDENEGG Zool. Anz. **61.**

Strongylostoma cirratum **sp. n.** p. 636 figs. 8, 9; BEKLEMISEV Bull. Acad. Sci. Russ. ser. 6 **15**

Allied to Turbellaria :—*Temnocephala* spp., morphology discussed; HASWELL Proc. Linn. Soc. N.S. Wales **49** pp. 509–521 pls. liv–lvi.

(*b*) Trematoda.

Trematoda, Brazil, catalogue of known forms with hosts; VIANA Mem. Inst. Oswaldo Cruz **17** pp. 95–227.

Flukes, larval, China; FAUST Amer. J. Hyg. **4** pp. 241–300 pls. i & ii.

Ancyrocephalus siluri **sp. n.**, from *Silurus glanis*; ZANDT Centralbl. Bakt. Abt. 1 **92** Orig. p. 231 text-figs. 7–12.

Auridistominae **subfam. n.** of *Telorchidae* for *A.* & *Pterygotomaschalos* (*q.v.*); STUNKARD Trans. Amer. Microsc. Soc. **43** p. 111.

Cephalogonimus compactus **sp. n.** from *Pseudemys floridana*; STUNKARD Trans. Amer. Microsc. Soc. **43** p. 106 fig. 10.

"*Cercaria*" *calliostomae* **sp. n.** from *Calliostoma conuloides*; DOLLFUS Ann. Parasitol. **1** p. 350 text-figs. 3 & 4.—"*C.*" *patialensis* "**sp. n.**," from *Melanoides tuberculatus*; SOPARKAR Ind. J. Med. Res. **11** pp. 933–941 pl. lxii.—"*C.*" *wolgensis* p. 202 text-figs. 1, 2, *impapillosa, ovata, mobilis brevis, mobilis longa* p. 203, *jurini, wellugensis, agrestis* p. 204, *pratensis, planorbis cornei, phokini, spinea, oblonga* p. 205, *intestinalis, hebes, acris, gilva* p. 206, *collicula, levecaudata* p. 207, "**spp. n.**," from Volga snails; SKWORTZOFF Arb. biol. Wolga-Station **7**.—"*C.*" *douthitti* Cort & "*C.*" *echinocauda* O'Roke, morphology compared; MILLER Trans. Amer. Microsc. Soc. **43** pp. 145–151 pl. vi.—"*C.*" C. develops into *Diplostomum volvens*, larval form of *Hemistomum spathaceum* Rud.; SZIDAT Zool. Anz. **61** pp. 249–266 12 text-figs. —"*C.*," question of classification of; BLACKLOCK & THOMPSON Ann. trop. Med. Parasitol. **18** pp. 235–237.

Cleistogamia **gen. n.** (*Holostomidae*) *holothuriana* **sp. n.**, brief note; FAUST J. Parasitol. **11** p. 121.

Cyclocoelum vagum from golden pheasant (*Chrysolophus*), p. 158 pl. xx figs. 1–5, *distomatum* from *Phasianus scintillans*, p. 161 figs. 6–9, **spp. n.**, MORISHITA J. Parasitol. **10**.

Dactylogyrus vastator **sp. n.**, on carp; NYBELIN Ark. Zool. **16** No. 28 2 pp. 3 text-figs.

"*Distoma subflavum*" Sonsino probably syn. *D. allostomum* Diesing and both may possibly become *Encyclometra allostomum* (Dies.); DOLLFUS Bull. Soc. Path. exot. **17** pp. 572–577 1 fig.

"*Echinocercaria*" *pachycerca* from *Planorbis* and *Spirulina*, pp. 69, 89, *stylites* from *Semisinus* pp. 69, 90 figs. 17, 18, "**spp. n.**"; LUTZ Mem. Inst. Oswaldo Cruz **17**.

Echinostomum parcespinosum from *Aramides cayennensis* and *Planorbis olivaceus* pp. 59, 79, figs. 1, 6, 19, 23, *erraticum*, various birds and snails, pp. 62, 83, fig. 35, *microrchis* from *Gallinula galeata* and *Creciscus viridis* pp. 64, 85 fig. 12, *exile* from various birds, and Limnaeids, pp. 65, 85 fig. 18, *neglectum* from *Nycticorax violaceus* pp. 66, 87 figs. 20–25 **spp. n.**; LUTZ Mem. Inst. Oswaldo Cruz **17**.

Encyclometra **gen. n.** (*Lepodermatidae*) *natricis* **sp. n.** from *Tropidonotus natrix*; BAYLIS & CANNON Ann. Mag. Nat. Hist. ser. 9 **13** pp. 194–196 pl. vi.—*E. bolognensis* **sp. n.** (Baer) priority over *E. natricis* B. & C.; BAYLIS & CANNON Ann. Mag. Nat. Hist. ser. 9 **13** p. 558.

Eurytrema dajii **sp. n.** from *Bos indicus*; BHALERAO Ann. trop. Med. Parasitol. **18** p. 146 pl. viii.

Gastrodiscoides Leiper, no justification for distinguishing from *Gastrodiscus hominis*; LANE Ann. trop. Med. Parasitol. **18** pp. 27–32.

Gymnophallus choledochus (Odh. 1900), from *Aythya ferina*, variations in morphology; ISAITCHIKOW C.R. Soc. biol. **91** pp. 1187–1189 8 text-figs.—*G. margaritarum* Dub., Cercaria of, in *Mytilus*, described; *G. duboisi* Dollf. a synonym of *G. m.*; PALOMBI Publ. Staz. zool. Napoli **5** pp. 137–152 pl. vii.

Hemistomum alatum Dies., larval development; RUSZKOWSKI Bull. Acad. Cracovie **1921** B pp. 237–250 3 text-figs.

Heterophyidae, classification, parasitism in birds and mammals, notes on certain forms; CIUREA Parasitol. **16** pp. 1–21 pls. i–v.

Mesorchis singularis **sp. n.** from *Ardeidae;* LUTZ Mem. Inst. Oswaldo Cruz **17** pp. 68, 88 fig. 10.—*M. oesophagolongus* Katsurada is really *Apophallus mühlingi* (Jägersk.); CIUREA Parasitol. **16** p. 12.

Monilifer pitangi **sp. n.** from *Pitangus* (*Sauroctonus*) *sulfurens;* LUTZ Mem. Inst. Oswaldo Cruz **17** pp. 68, 89 fig. 14.

Oculotrema **gen. n.** (*Polystomidae hippopotami* **sp. n.**; STUNKARD Parasitol. **16** pp. 436–440 pl. xvi.

Odhneria **gen. n.** (*Lepodermatidae*) *bolognensis* **sp. n.** from *Tropidonotus natrix;* BAER Parasitol. **16** pp. 22–31 2 text-figs.

Ornithobilharzia odhneri **sp. n.** from Asiatic curlew; FAUST J. Parasitol. **11** pp. 50–54 pl. xiv.

Paraplagiorchis **gen. n.** (*Lepodermatidae*) *timotheevi* **sp. n.**, from *Tropidonotus natrix* (possibility of its being syn. *Encyclometra q.v.*); DOLLFUS Bull. Soc. Zool. France **49** pp. 268–276 8 text-figs.

Plagiorchis arcuatus **sp. n.** from hen; STROM Zool. Anz. **60** pp. 274–280 2 text-figs.

Pleurogenes medians Ols., Metacercaria in *Gammarus;* DOLLFUS C.R. Acad. Sci. **179** pp. 305–308 1 text-fig. —*P. m.* Olss., notes on life-cycle, Metacercaria in *Gammarus pulex;* MATHIAS Bull. Soc. Zool. France **49** pp. 375–377 4 text-figs.

Polystoma multifalx p. 97 pl. i. *floridanum* p. 100 pl. ii figs. 7 & 8 **spp. n.** from turtles; STUNKARD Trans. Amer. Microsc. Soc. **43.**

Prohemistomum odhneri **sp. n.**, from *Crocoroca* (*Haemulon*); TRAVASSOS C.R. Soc. biol. **91** pp. 835–838 2 text-figs.

Psilotrema spiculigerum Mühling, life-history, hosts; MATHIAS C.R. Acad. Sci. **178** pp. 1217–1219.

Pterygotomaschalos **gen. n.** (*Telorchidae* **fam. n.**) *attenuatus* **sp. n.** from *Chelydra serpentina;* STUNKARD Trans. Amer. Microsc. Soc. **43** p. 109 fig. 9.

Sanguinicola, remarks on morphology pp. 403–412, *S. chalmersi* **sp. n.** Odhn., p. 410 1 text-fig.; ODHNER & WOODLAND Q. J. microsc. Sci. **68.**

Schistosoma, three distinct species (*S. bovis* being the third) considered to infect man in Africa; CAWSTON J. trop. Med. **27** pp. 283 & 284.

Testifrondosa **gen. n.** (*Psilostominae*) *cristata* **sp. n.**, from *Sus c.;* BHALERAO Ann. trop. Med. Parasitol. **18** p. 143 pl. vii.

Tetracotyle typica Dies., Cercaria and developmental stages; SZIDAT Zool. Anz. **58** pp. 299–314 9 text-figs.—*T. sogdiana* **sp. n.**, from *Schizothorax intermedius;* PAWLOWSKY & ANITSCHKOW Russ. hydrobiol. Zs. **2** pp. 219–224, 1 text-fig.

Verdunia tricoronata Lahille & Joan, is a synonym of *Balanorchis anastrophus;* TRAVASSOS C.R. Soc. Biol. **90** p. 56.

(c) Cestoda.

Cestoda from sharks and skates; LINTON Proc. U. S. Nat. Mus. **64** Art. 21 pp. 1–114 pls. i–xiii.

Abothrium van Bened., notes on genus and principal species; CHOLODKOVSKY Bull. Acad. Sci. Petrograd ser. 6 **12** pp. 2311–2314 2 text figs.

Amplicaecum africanum **sp. n.** from *Bufo regularis;* TAYLOR Ann. trop. Med. Parasitol. **18** p. 604 text-figs. 5–8.

Balanotaenia **gen. n.** (*Caryophyllaeidae*) *bancrofti* **sp. n.** from *Tandanus*-Queensland; JOHNSTON Proc. Linn. Soc. N.S.W. **49** pp. 339–347 17 text figs.

Bothriocephalus pycnomerus **sp. n.** from *Ophiocephalus marulius;* WOODLAND Parasitol. **16** p. 441 figs. 1–14.

Caryophyllaeus caspicus p. 97, text-figs. 1–5, *fimbriceps* p. 104 figs. 6–8, described (in Russian); ANNENKOVA-CHLOPINA Bull. Acad. Sci. Petrograd ser. 6 **13.**—*C. skrjabini* **sp. n.** from *Abramis brama*, morphology, comparison with other forms; POPOFF Russ. hydrobiol. Zs. **3** pp. 253–258 2 text-figs. —*C. niloticus* **sp. n.**; KULMATYCKI Res. Swedish Zool. Exped. Egypt and White Nile 1901 No. **27a** 1924.

Cotugnia cuneata **sp. n. varr. n,** *tenuis* p. 304 pl. xiii fig. 6 text-fig. 2 *nervosa* p. 305 pl. xiii fig. 1 and text-fig. 1B from Rangoon pigeon; MEGGITT Parasitol. **16.**

Cylindrotaenia americana Jewel, of Batrachians, note on development and life-cycle; Ann. Parasitol. **2** pp. 74–81 1 text-fig.

Dibothriocephalus parvus Stephens, anatomy, *D. latus,* malformation; YOSHIDA & OGATA Ann. trop. Med. Parasitol. **18** pp. 15–22 pl. i.

Dipleurostyla tristyla **sp. n.** Astroni: TAGLIANI Ann. Mus. Zool. Univ. Napoli **5** No. 3 p. 10 text-fig. 2.

Dipylidium fuhrmanni **sp. n.** from *Zibethailurus serval* and *Felis caffra;* BAER Ann. Parasitol. **2** p. 245.

Diphyllobothrium theileri **sp. n.,** from *Zibethailurus serval* and *Felis caffra;* BAER T.c. p. 240.

Echinococcus cruzi **sp. n.** from *Dasyprocta agouti;* BRUMPT & JOYEUX T.c. pp. 226–231 4 text-figs.

Fuhrmannella **gen. n.** (*Anoplocephalidae*) *transvaalensis* **sp. n.** from *Thryonomys swinderenianus;* BAER T.c. p. 242.

Gangesia **gen. n.** (*Proteocephalidae*) *wallago* p. 445 figs. 15–24, 34, 35, *macrones* p. 446 figs. 25–33, from Siluroid fishes, **spp. n.** ; WOODLAND Parasitol. **16**

Hepatotaenia festiva (Rud. 1819), anatomy; THEILER Ann. trop. M. de Parasitol. **18** pp. 3–13 7 text-figs.

Houthugnia torquata **sp. n.** from Rangoon pigeon; MEGGITT Parasitol. **16** p. 307 text-figs. 3 & 4.

Hymenolepis bauchei **sp. n.** from fowl; JOYEUX Ann. Parasitol. **2** pp. 314–318 3 text-figs.—*H. longior syn. H. nana;* BAYLIS Parasitol. **16** p. 415. —*H. macracanthos* (v. Linst), and considerations on the genus; FUHRMANN J. Parasitol. **11** pp. 33–43 pl. xii.—*H. macroscelidarum* **sp. n.** from *Macroscelides brachyrhynchus;* BAER Ann. Parasitol. **2** p. 246.—*H. nana,* development in white mouse, regarded as same form as "*longior,*" "*fraterna*"; WOODLAND Parasitol. **16** pp. 424–435.—*H. nana* and *H. fraterna* one and the same species; WOODLAND Nature **113** p. 675. —*H. rugosa* Clerc **var. n.** *birmanica,* from Rangoon pigeon; MEGGITT Parasitol. **16** p. 309 text-fig. 5.

Ichthyotaenia adherens **sp. n.** from *Cestracion* and *Galeus;* LINTON Proc. U. S. Nat. Mus. **64** Art. 21 p. 43 figs. 55–59.

Inermicapsifer aberratus **sp. n.** from *Mus. moggi;* BAER Ann. Parasitol. **2** p. 244.

Luheella **gen. n.** (*Luheellidae* **fam. n.**) *pretoriensis* **sp. n.** from *Otocyon megalotis;* BAER Ann. Parasitol. **2** p. 239.

Oochoristica amphisbeteta **sp. n.** from mongoose; MEGGITT Parasitol. **16** p. 48 text-fig. 1.—*O. ichneumontis* **sp. n.** from *Herpestes gracilis;* BAER T.c. p. 243.—*O. theileri* **sp. n.** from from *Agama hispida;* FUHRMANN Ann. trop. Med. Parasitol. **18** p. 505 text-fig. 1.

Ophiotaemia mönningi **sp. n.** from *Leptodira hotambeia;* FUHRMANN Anntrop. Med. Parasitol. **18** p. 510 text. fig. 2.—*O. testudo* **sp. n.** from *Amyda spinifera;* MAGRATH J. Parasitol. **11** pp. 44–49 pl. xiii.

Orygmatobothrium forte **sp. n.** from *Cestracion zygaena;* LINTON Proc. U. S. Nat. Mus. **64** Art. 21 p. 20 figs. 8–10.

Otobothrium magnum **sp. n.** from *Rhynchobatus djeddensis;* SOUTHWELL Ann. trop. Med. Parasitol. **18** p. 486 text-figs. 12–14.

Paranoplocephala acanthocirrosa **sp.n.** from *Otomys bisulcatus;* BAER Ann. Parasitol. **2** p. 241.

Phoreiobothrium pectinatum p. 36 figs. 47–50, *exceptum* p. 37 figs. 41–44 **spp. n.** from *Cestracion zygaena;* LINTON Proc. U. S. Nat. Mus. **64** Art. 21.

Raillietina (*Ransomia*) *parviuncinata* **sp. n.** from duck, MEGGITT Ann. Mag. Nat. Hist. ser. 9 **14** pp. 324–326 1 fig.—*R.* **nom. nov.** for sub. gen. *Johnstonia,* replaced, type-species *R. crassula* (Rud.); FUHRMANN Ann. Parasitol. **2** pp. 312 & 313.

Reditaenia **gen. n.** for Redi's thick-necked *Taenia* of the cat, & *R. borreli* **sp. n.** from *Hylobates leuciscus*; SAMBON J. trop. Med. **27** p. 165 and text-figs.

Rhynchobothrium insigne p. 74 figs. 99–107, from *Carcharinus, uncinatum* p. 81 figs. 74–78 from *Vulpecula, Xiphias* **spp. n.**, ; LINTON Proc. U. S. Nat. Mus. **64** Art. 21.

Rhinebothrium maccallumi **sp. n.** from *Dasybatis centrura*; LINTON Proc. U. S. Nat. Mus. **64** Art. 21 p. 11 figs. 2–4.

Sparganum hamadryadis **sp. n.**; TEODORO Arch. Zool. ital. **9** pp. 159–163 2 text-figs.—*S. philippinensis* **sp. n.** from Palm civet (*Paradoxurus p.*); TUBANGUI Philippine J. Sci. **24** p. 752 text-fig. 2.—*S. reptans*, hosts, life-history, belongs to genus *Diphyllobothrium*, comparison with other species of *D.*; MEGGITT Ann. trop. Med. Parasitol. **18** pp. 195–204 pl. ix.—*S.* sp. (= *Diphyllobothrium* ?) from mongoose, Rangoon; MEGGITT Parasitol. **16** p. 52 text-fig. 2.

Synbothrium malleum **sp. n.** from *Dasybatis centrura* p. 88 figs. 95–98; LINTON Proc. U. S. Nat. Mus. **64** Art. 21.

Taenia parva from *Genetta ludia* p. 246, *hyaenae* from *H. brunea* p. 247, **spp. n.**; BAER Ann. Parasitol. **2**.—*T. twitchelli* **sp. n.** from porcupine (*Erethizon*), proliferation; SCHWARTZ Proc. U. S. Nat. Mus. **66** art. 24 pp. 1–4 pl. i.

Tetrarhynchidae and *Coenomorphidae*, classification, notes on various forms from Ceylon marine fishes; SOUTHWELL Ann. Trop. Med. Parasitol. **18** pp. 459–491 14 text-figs.

Tetrarhynchus palliatus **sp. n.** from *Cestracion zygaena* LINTON Proc. U. S. Nat. Mus. **64** Art. 21 p. 95 figs. 81–84.

NEMERTINEA.

Micrura rockalliensis nom. nov. provis. (whether Dollfus or Ditlevsen is not at all clear); DOLLFUS Bul. Inst. océan **438** p. 19 3 text-figs.

Prostoma sebethis Montic, morphology, systematic considerations on the genus; MONTICELLI Arch. zool. ital. **8** pp. 401–423 pl. xvi.

NEMATHELMINTHIA.

SUBJECT INDEX.

COMPREHENSIVE AND GENERAL.

Nomenclature.—STILES, **373**; STILES & BROWN, **374**.

Biographies.—SHIPLEY, **341**.

Addresses, Reviews.—MÖNNIG, **266**; SKWARRA, **346**.

Museum Collections.—TAYLOR, **385**; THORNTON, **396**.

Economics.—*Relation to disease*; FAIRLEY & LISTON, **107**; LEIDY, **217** NICOLL, **282**; THIROUX, **392**.

Miscellaneous.—*Cultivation*: CHANDLER, **60**. *Experimental Infection*: TORRES, **398**. *Technique*: GORDON & MACFIE, **145**; LANE, **214**; MAPLESTONE, **236**.

STRUCTURE.

General Morphology. — *Nematoda*: BOULENGER, **44**; CHANDLER, **57**; CRAM, **81**; DAUBNEY, **84**; GRAYBILL, **150** & **151**; KORKE, **193** & **194**; MACFIE, **226**; MORISHITA, **274**; NEVEU-LEMAIRE, **280**; RENSCH, **317**; SEIDENSCHWARZ, **335**; STAUFFER, **359**; STEINER, **366** & **367**; TAYLOR, **384** & **385**; THORNTON, **396**. *Acanthocephala*: KOSTILEFF, **195**.

Excretory System.—KOSTYLEV, **197**.

Nervous System. — KOCHANOWSKI, **192**.

Sexual Forms.—BAYLIS, **21**.

Sense Organs. — HÖPPLI, **170**; STEINER, **366**.

Histology.—FILIPJEV, **120**.

Cytology.—COBB, **70–72**; DEHORNE, **91**; WALTON, **408**.

PHYSIOLOGY.

Nutrition.—DEHORNE, **91**.

Movement.—STAUFFER, **358**.

Environmental Effects: Response to stimuli.—FÜLLEBORN, **132**; HONDA, **172**; KOSUGE, **199**; RENSCH, **318**; RUPPERT, **322**.

REPRODUCTION AND DEVELOPMENT.

Life-Cycle.—GRAYBILL, **149**; GUBERLET, **154**; HASEGAWA, **160**; THOMAS, **393**.

Sexual Forms.—SEIDENSCHWARZ, **335**.

Maturation, Fertilization.—SCHLEIP, **325**.

Development.—FILIPJEV & MICHAJLOVA, **121**.

Larval Forms.—CHUITON, **65**; IHLE & OORDT, **175**; NYBELIN, **289**.

ETHOLOGY.

Bionomics, habits. — CILLIS, **66**; KOSUGE, **199** & **200**; MENZEL, **253**; MHASKAR, **256**; OBERMAYER, **290**; SEIDENSCHWARZ, **335**; THOMAS, **393**.

Hibernation.—BLUNCK, **42**.

Parasitism.—*Transmission, infectivity*: BLANCHARD & LAIGRET, **40**; FAIRLEY & LISTON, **107**; FAUST, **111**; FÜLLEBORN, **131**; KOSUGE, **199**; THIROUX, **392**; WALKER, **407**. "*Carriers*": MAPLESTONE, **235**; NITZULESCU, **285**. *Relation to host's tissue*: BAYLIS, **23**; FÜLLEBORN, **131** & **133**; GUBERLET, **154**; HASEGAWA, **160**; KOSUGE, **198** & **199**.

Parasitism: Hosts. — *General*: BAYLIS, **23**. *Plantae*: RENSCH, **318**. *Insecta*: THEILER, **390**. *Pisces*: SKRJABIN, **343**. *Amphibia*: STEINER, **366**. *Reptilia*: BAYLIS, **22**; CHAPIN, **63**; TRAVASSOS, **400**. *Aves*: CHANDLER, **58**; TERNI, **387**. *Mammalia*: BAYLIS, **24**; CHANDLER, **57** & **59**; CHAPIN, **62**; CRAM, **81**; DAUBNEY, **84**; GEDOELST, **138**; KORKE, **193**; LE ROUX, **221**; LUTZ, **224**; MANALANG, **234**; MORISHITA, **274**; NEVEU-LEMAIRE, **279** & **280**; RANSOM **310**; TAYLOR, **384**.

VARIATION, PHYLOGENY.

Abnormalities.—CHANDLER, **56**.

Phylogeny.—BAYLIS, **20**.

DISTRIBUTION (GEOGRAPHY).

[*Vide etiam* "Parasitism."]

Geographical.—*Europe*: CILLIS, **66**; KOSTYLEV, **196**; KREIS, **207**; MICOLETZKY, **261**; MONARD, **268**; OBERMAYER, **290**; SCHNEIDER, **329**; SEIDENSCHWARZ, **335**; SKWARRA, **345**; STEFANSKI, **360**. *Africa*: EASMAN, **103**; MICOLETZKY, **262** & **263**. *Asia*: BERNARD, BABLET & PONS, **34**; LAGRANGE, **212**. *West Indies*: STEINER, **367**. S. *America*: KREIS, **206**.

SYSTEMATIC.

(*a*) Nematoda.

Nematoda, from stagnant crater-lakes, Astrom; CILLIS Ann. Mus. zool. Napoli Suppl. No. **8** 1920 pp. 1–35 pl. xii.

Nematodes, free-living, Wolga; MICOLETZKY Art. biol. Wolga-Station **7** pp. 3–29 7 text-figs.

Nematodes, free-living, Suez; MICOLETZKY SitzBer. Akad. Wiss. Wien Abt. 1 **132** pp. 225–261 4 text-figs and *op. cit.* **133** pp. 137–179 7 text-figs.

Nematodes, free-living, Oldesloe (Holstein) notes; SCHNEIDER Arch. Hydrobiol. **15** pp. 209–224 4 text-figs.

Nematodes, free-living, Poland; STEFANSKI Bull. intern. Acad. Cracovie **1916 B** pp. 173–178 pl. ix.

Acanthocheilonema evansi (Lewis), notes on; BOULENGER Parasitol. **16** pp. 419–423 4 text-figs.

Acrobeles v. Linst and *Cephalobus* Bast., amended characterization; COBB J. Parasitol. **11** p. 108.

Adoncholaimus comparison of different species, pp. 108–110, *A. aralensis* **sp. n.** p. 110 3 text-figs.; FILIPJEV Zool. Anz. **58**.

Agamascaris (provisional "generic" name for larval Ascarids) *odontocephala* p. 30 figs. 58–61, *enopla* p. 31 figs. 62–65, **spp. n.**, from *Hyla carolinensis*; STEINER J. Parasitol. **11**.

Allomermis **gen. n.** (*Mermithidae*) p. 1, *trichotopson* **sp. n.** p. 2, pls. i & ii, Jamaica; STEINER Proc. U. S. Nat. Mus. **65** Art. 14.

Allomonhystera **gen. n.** (*Monhysteridae*) *tripapillata* **sp. n.** p. 23 fig. 6a–b; MICOLETZKY Arb. biol. Wolga-Station **7.**

Amirinae **sub. fam. n.** of *Strongylidae*; NEVEU-LEMAIRE Ann. Parasitol. **2** p. 129.

Angusticaecum brevispiculum **sp. n.** from *Testudo denticulata;* CHAPIN Proc. U. S. Nat. Mus. **65** Art. 13 p. 4 figs. 10–12.

Aphelenchus neglectus **sp. n.** from various plants, morphology; RENSCH Zool. Anz. **59** pp. 277–280 1 text-fig.

Aplectana pusilla **sp. n.** from *Amphisbaena;* MIRANDA Mem. Inst. Oswaldo Cruz **17** p. 47 figs. 5 & 6. (French translation, p. 53.)

Araeolaimus bioculatus (de Man) **var. n.** *filiformis,* Adriatic; MICOLETZKY S.B. Akad. Wiss. Wien 1 **133** p. 173 text-fig. 7.

Ascaris lumbricoides, Linn. includes Ascarids of Man, pig and chimpanzee, essentially same morphology; THORNTON Ann. trop. Med. Parasitol. **18** pp. 99 & 100 2 text-figs.—*A. ovis,* from *Capreolus,* note on; NEVEU-LEMAIRE Ann. Parasitol. **1** p. 265 5 text-figs.

Austrostrongylus **gen. n.** (*Trichostrongylidae*) *macropodis* **sp. n.** from Bennett's kangaroo; CHANDLER Parasitol. **16** pp. 160–163 5 text-figs.

Belascaris Leiper 1907, a synonym of *Toxocara* Stiles 1905; STILES & BROWN J. Parasitol. **11** p. 93.

Buissonia **gen. n.** (*Strongylidae*) p. 142, *rhinocerotis* p. 144 pl. xvii, *africana* p. 145 pls. xviii & xix figs. 1, 2, *longibursa* p. 146 p. xix figs. 3–6, **spp. n.,** African rhinoceros; NEVEU-LEMAIRE Ann. Parasitol. **2.**

Caconema **nom. nov.** for *Heterodera radicicola*; COBB J. Parasitol. **11** p. 118 text-fig. N.

Camacolaiminae **sub. fam. n.** of *Chromadoridae*; MICOLETZKY S.B. Akad. Wiss. Wien. Abt. 1 **132** p. 258.

Capillaria columbae (Rud.) from chicken and turkey, morphology; GRAYBILL J. Parasitol. **10** pp. 205–207 pl. xxiii.

Capillospirura ovotrichuria **gen.** et **sp. n.** from sterlet; SKRJABIN Russ. hydrobiol. zs. **3** p. 63 1 fig.

Cheilobus **gen. n.** near *Rhabditis,* for *R. schneideri* Bütschli, and *quadrilabiatus* **sp. n.**; COBB J. Parasitol. **11** p. 116 text-fig. M.

Cosmocercella **gen. n.** *haberi* **sp. n.,** from *Hyla carolinensis*; STEINER J. Parasitol. **11** pp. 3, 22, pls. i–v.

Cylicobrachytus **gen. n.,** type *Cylicostomum prionodes;* CRAM J. Agric. Research **28** p. 669.

Cylicotoichus **gen. n.** type *Cylicostomum montgomeryi;* CRAM T.c. p. 669.

Cylindropharynx ornata **sp. n.** from *Equus grevyi;* CRAM J. Agric. Research **28** p. 661 8 text-figs.

Deletrocephalus variabilis **sp. n.** from *Testudo denticulata;* CHAPIN Proc. U. S. Nat. Mus. **65** art. 13 p. 3 figs. 6–9.

Diesingia synonym of *Sebekia;* TRAVASSOS C.R. Soc. Biol. **90** p. 239.

Dorylaimus crassiformis p. 126 fig. 3, *exiguus* p. 129 fig. 5, *tenuiaculeatus* p. 130 fig. 6 **spp. n.** Dutch Guiana; KREIS Ann. biol. lacustre. **13.**

Dorylaimus declinatoaculeatus **sp. n.** p. 51 fig. 10, *stagnalis* Duj. **var. n.** *filiformis* p. 50 figs. 8, 9; KREIS Jahresber. Ges. Graubündens **63.**

Enoploides fluviatilis **sp. n.** p. 13 fig. 1a–c; MICOLETZKY Arb. biol. Wolga-Station **7.**

Falcaustra, Lane 1915, probably a synonym of *Spironoura* Leidy 1856; CHAPIN J. Parasitol. **10** p. 212.

Filaria bosei p. 399 text-figs. 3 & 4, *brevicauda* p. 400 fig. 5, **spp. n.** from *Dissemurus paradiscus;* CHANDLER Parasitol. **16.**

Gongylonema Molin, notes on and synopsis of species; SAMBON J. trop. Med. **27** pp. 157–161, 4 text-figs.—*G. ransomi* Chapin (sp. n.) from swine; CHAPIN Proc. U. S. Nat. Mus. **62** Art. 10 pp. 1–3 2 text-figs.

Grammocephalus intermedius **sp. n.,** from African Rhinoceros; NEVEU-LEMAIRE Ann. Parasitol. **2** p. 128 pl. xi.

Hamulofilaria **gen. n.** (*Filariidae*) *indica* **sp. n.** from *Cissa chinensis;* CHANDLER Parasitol. **16** p. 398 text-figs. 1 & 2.

Henryella **gen. n.** (*Strongylidae*) *raillieti* p. 138, pl. xiv, *bozasi* p. 139 pl. xv, *zeltneri* p. 140 pl. xvi figs. 1–4, *didieri* p. 141 pl. xvi figs. 5–8, **spp. n.**, from rhinoceros; NEVEU-LEMAIRE Ann. Parasitol. **2.**

Hepaticola hepatica Hall 1916, from rats, Shanghai, note on; LAGRANGE Bull. Soc. Path. exot. **17** pp. 658 & 659.

Iota crotaloides **sp. n.**; COBB J. Parasitol. **11** p. 102 text-fig. 13.

Ironus rotundicaudatus **sp. n.**; KREIS Jahresber. Ges. Graubündens **63** p. 36 fig. 5.—*I. truncatus* **sp. n.** Poland; STEFANSKI Bull. Acad. Cracovie **1916** B p. 174 fig. 2.

Khalilia **gen. n.** (*Strongylidae*) *rhinocerotis* **sp. n.** p. 130 pl. xii figs. 1–5; NEVEU-LEMAIRE Ann. Parasitol. **2.**—*K. r.*, female, described; ID. T.c. pp. 224 & 225 pl. xxi.

Jonema isseli **sp. n.** p. 258 text-fig. 4; MICOLETZKY S.B. Akad. Wiss. Wien Abt. 1 **132.**

Longicyatholaimus **gen. n.** (*Chromadoridae*) for *L. longicaudatus* (de Man) and other forms; MICOLETZKY S.B. Akad. Wiss. Wien 1 **133** p. 140.

Memphisia rhinocerotis **sp. n.** p. 136 pl. xiii; NEVEU-LEMAIRE Ann. Parasitol. **2.**

Metastrongylus, Molin, characters of genus and species; SCRIABINE C.R. Soc. Biol. **90** pp. 1215 & 1216.

Microfilaria cephalocauda text-fig. 9, *colubroides* fig. 10 (given in reference as *colubriformis*), p. 401, from *Dissemurus paradiscus*, *cissae* figs. 6, 7, *comma* fig. 8, p. 403 from *Cissa chinensis*, **spp. n.**; CHANDLER Parasitol. **16.**—*M. lewisii* **sp. n.** from dog, compared with other forms; KORKE Ind. J. Med. Res. **11** pp. 1231–1238 pl. lxxxiv.

Micropleura vivipara, male form described; BAYLIS Ann. Mag. Nat. Hist. ser. 9 **13** pp. 199–201 1 text-fig.

Monodontus, type-species *semicircularis* Stiles & Hassall; STILES & BROWN J. Parasitol. **11** p. 97.

Monohystera bipunctata G. Schneider, note on morphology; SKWARRA Arch. Hydrobiol. **15** pp. 225 & 226 1 text-fig. —*M. heteroparva* **nom. nov.** for *M. parva* Micol. 1922; MICOLETZKY S.B. Akad. Wiss. Wien 1 **133** p. 169.

Monochus spp., Utah, notes on, specific diagnoses, *M. parabrachyurus* p. 162 pl. vi figs. 5, 6, pl. vii figs. 1, 2, *striatus* p. 163 pl. vi fig. 8 pl. vii fig. 3, *montanus* p. 164 pl. vii figs. 4, 5, *amphigonicus* p. 165 pl. viii figs. 1–3, *trionchus* p. 166 pl. viii figs. 4, 5, **spp. n.**; THORNE Trans. Amer. Microsc. Soc. **43.**—*M. macrostoma* Bast. **form. n.** *brevicauda*; MICOLETZKY Arb. biol. Wolga-station **7.** p. 17.—*M. serramarginatus* p. 124 fig. 1, *tenuidentatus* p. 125 fig. 2, **spp. n.**, Dutch Guiana; KREIS Ann. Biol. lacustre **13.**—*M. simmenensis* p. 33 fig. 3, *brevicavatus* p. 34, **spp. n.**; KREIS Jahresber. Ges. Graubündens 63.

Nematodirus furcatus May only an abnormal form of *N. filicollis;* MAY J. Parasitol. **10** pp. 212 & 213.—*N. leporis* **sp. n.** p. 1 figs. 2–5; CHANDLER Proc. U. S. Nat. Mus. **66** Art. 16.—*N. spatiger* Raill., var., from cattle; TERNI Rendic. Convegno U.Z.I. **1923** p. 53 pl. ii.

Neochromadora **gen. n.** (near *Euchromadora*) type *N. poecilosoma* (de Man), p. 157; MICOLETZKY S.B. Akad. Wiss. Wien Abt. 1 **133.**

Neodiplogaster **gen. n.** (?) *tropica* **sp. n.**, from cocoa pods; COBB J. Parasitol. **11** p. 105 text-fig. D.

Obeliscoides **nom. nov.** for *Obeliscus* Grayb.; GRAYBILL Parasitol. **16** p. 317.

Obeliscus cuniculi Graybill, note on; CHANDLER Proc. U. S. Nat. Mus. **66** Art. 16 p. 3 figs 6–11.

Oesophagostomum mwanzae **sp. n.** from wart-hog (*Phacochoerus*); DAUBNEY Ann. Mag. Nat. Hist. ser. 9 **13** pp. 542–546 4 text-figs.—*O. yorkei* from *Phacocaerus*, p. 401 text-fig. 2, *ventri* from Brazil wild cat, p. 404, fig. 3, **spp. n.**; THORNTON Ann. trop. Med. Parasitol. **18.**

Oswaldocruzia leidyi Trav. from *Hyla carolinensis*, account of; STEINER J. Parasitol. **11** p. 26 figs. 32–57.

Paracanthonchus **gen. n.** (*Chromadoridae*), for *P. caecus* (Bastian) and other forms, p. 138; MICOLETZKY S.B. Akad. Wiss. Wien Abt. 1 **133.**

Paradoxolaimus **gen. n.** (near *Microlaimus, Cyatholaimus*) p. 132, *demani* **sp. n.** p. 133 fig. 8, Dutch Guiana; KREIS Ann. biol. lacustre **13.**

Paramermis steineri **sp. n.**, Dutch Guiana; KREIS T.c. p. 134 fig. 9.

Paraphanolaimus **gen. n.** (*Anguillulidae*) *behningi* **sp. n.** p. 25 fig. 7a, b; MICOLETZKY Arb. biol. Wolga-Station **7.**

Paraquilonia **gen. n.** (*Strongylidae*) *brumpti* **sp. n.** p. 125 pl. x; NEVEU-LEMAIRE Ann. Parasitol. **2.**

Paroncholaimus parpapilliferus **sp. n.**, Adriatic; MICOLETZKY S.B. Akad. Wiss. Wien abt. 1 **132** p. 236 text-fig. 2.

Paroxystomina **gen. n.** (*Enoplidae*) *asymmetrica* **sp. n.** Adriatic; MICOLETZKY T.c. p. 233 text-fig. 1.

Philometra rischta **sp. n.** from *Pseudaspius leptocephalus;* SKRJABIN Russ. hydrobiol. Zs. **2** pp. 236–240 1 text-fig.

Physaloptera physignathi **sp. n.** from *P. lesueurii*, Australia; BAYLIS Ann. Mag. Nat. Hist. Ser. 9 **13** pp. 309–311 2 text-figs.

Porrocaecum crocodili **sp. n.**, Gold Coast; TAYLOR Ann. trop. Med. Parasitol. **18** p. 601 text-figs. 1–4.

Praeacanthonchus **gen. n.** (*Chromadoridae*) type *P. punctatus* (Bastian), and *P. mediterraneus* **sp. n.**, p. 138; MICOLETZKY S.B. Akad. Wiss. Wien Abt. 1 **133.**

Prochromadorella **gen. n.** (*Chromadoridae*) type *P. neapolitana* (de Man), syn. *C. procera* Micol., and other forms; MICOLETZKY T.C. p. 164.

Prodesmodora **gen. n.** (*Chromadoridae*) *wolgensis* **sp. n.**; MICOLETZKY Arb. biol. Wolga-Station **7** p. 19 fig. 4a, b.

Promononchus **gen. n.** (*Enoplidae*) *filipievi* **sp. n.** p. 15 fig. 2a, b; MICOLETZKY T.c.

Protospirura gracilis **sp. n.** from cat; CRAM J. Amer. vet. Ass. **65** No. 1.

Proncholaimus **gen. n.** (*Enoplidae*) *megastoma* (Eberth), p. 242 with **var. n.** *neapolitanus* p. 243; MICOLETZKY S.B. Akad. Wiss. Wien 1 **132.**

Pteridopharynx omoensis **sp. n.**, from *Rhinoceros;* NEVEU-LEMAIRE Ann. Parasitol. **2** p. 134 pl. xii figs. 6–9.

Quilonia rhinocerotis **sp. n.** p. 123 pl. ix; NEVEU-LEMAIRE T.c.

Rhabditis impar, parateres fig. k, p. 116, **spp. n.**; COBB J. Parasitol. **11.**

Rhabdogaster, diagnosis of genus, characters and anatomy, with special reference to *R. hagmeieri* **sp. n.**; STAUFFER Zool. Jahrb. Abt. Syst. **49** pp. 119–130 7 text-figs.

Sauricola **gen. n.** (*Strongylidae*) p. 1, *sauricola* **sp. n.** p. 2 pl. i, from *Testudo denticulata;* CHAPIN Proc. U. S. Nat. Mus. **65** Art. 13.

Saurositus **gen. n.** (*Filariidae*) *agamae* **sp. n.** from *A. colonorum;* MACFIE Ann. trop. Med. Parasitol. **18** pp. 409–412 1 text-fig.

Sebekia acuminata, samboni **spp. n.** from crocodiles; TRAVASSOS C.R. Soc. Biol. **90** p. 240.

Simondsia avicula **sp. n.** from fowls; TERNI Rendic. Convegno U.Z.I. **1923** p. 49 pl. i.

Spiroptera sanguinolenta (Rud. 1819) emend. *Spirocerca sanguinolenta* (R. & H. 1911), from dog; KOEKE Ind. J. Med. Res. **11** pp. 1239–1243 2 text-figs.

Strongylidae of *Equidae*, key to classification of genera and species; CRAM J. Agric. Res. **28** p. 666.—*S.* of African rhinoceros (*R. bicornis*), described; NEVEU-LEMAIRE Ann. Parasitol. **2** pp. 121–154 pls. ix–xx.

Strongylus vulgaris (Looss), larval development; IHLE & OORDT Proc. Akad. Vet. Amsterdam **27** pp. 194–200 5 text-figs.

Syngamus hippopotami **sp. n.**; GEDOELST Ann. Parasitol. **2** pp. 307–311 3 text-figs.

Trichosomoides crassicauda (Bell.) biology, life-history; THOMAS J. Parasitol. **10** pp. 105–136 pls. xiv–xviii.

Trichostrongylus affinis **sp. n.** from rabbit; GRAYBILL Proc. U. S. Nat. Mus. **66** Art. 11 pp. 1–3 1 pl.

Tripyla punctata **sp. n.** p. 176 fig. 4, *T. gracilis* Bast. **var. n.** *punctata* p. 177 fig. 6, Poland; STEFANSKI Bull. Acad. Cracovie **1916** B.

Tylenchorhynchus behningi **sp. n.**; MICOLETZKY Arb. Biol. Wolga-Station **7** p. 27.

Tylenchus arboricolus p. 28, *durus* p. 30 text-figs. 1 & 2, **spp. n.** tree-infesting; COBB Ann. Zool. aplic. **9**.—*T. robustus* de Man **var. n.** *exiguus*; KREIS Jahresber. Ges. Graubündens **63** p. 44 fig. 7.

Uncinaria criniformis and *U. stenocephala* (syn. *polaris*), from dog, fox and badger, comparison; RANSOM Proc. U. S. Nat. Mus. **65** Art. 20 pp. 1–5 pl. i.—*U. stenocephala* (*criniformis*?) of dog, note on; FÜLLEBORN Arch. Schiffs. Tropen Hyg. **28** pp. 12–15 pl. i.

(*b*) Nematomorpha.

[Vacant.]

(*c*) Acanthocephala.

*Acanthocephala described by Leidy, critical study of; VAN CLEAVE Proc. Acad. nat. Sci. Philadelphia **76** pp. 279 334 pls. xiv–xviii.

Leptorhynchoides **gen. n.** type L. *plagicephalus* (Westrumb), anatomy, distinctions *Echinorhynchus*; KOSTILEFF Ann. Parasitol. **2** pp. 214–223, 3 text-figs.

CHAETOGNATHA, GASTROTRICHA, ROTIFERA.

SUBJECT INDEX.

COMPREHENSIVE AND GENERAL.

Miscellaneous. — *Technique*: MARTINI, **238**.

STRUCTURE.

General Morphology.—KUHL, **209**; LEISSLING, **220**; REMANS, **316**.

Histology.—KUHL, **209**.

Cytology.—STORCH, **377**.

PHYSIOLOGY.

General.—NAUMANN, **278**.

Longevity.—SPEMANN, **356**.

Effects of reagents, etc.—BIANCO, **37**.

REPRODUCTION AND DEVELOPMENT.

Sexual Dimorphism.—LEISSLING, **219**.

Oogenesis, Parthenogenesis.—STORCH **377**.

Maturation, Fertilization.—STORCH, **377**.

ETHOLOGY.

Bionomics, Habits.—HARNISCH, **158**; NAUMANN, **278**; SPEMANN, **356**; STEINECKE, **365**.

VARIATION, PHYLOGENY.

Inheritance, Variation.—BEAUCHAMP, **29** & **30**.

DISTRIBUTION (GEOGRAPHY).

Geographical.—*Europe*: FADEEW, **105**; HAUER, **163**; KRMPOTIĆ, **208**; REMANS, **316**; STEINECKE, **365**. *Australia*: COLLEDGE, **77** & **78**. *America*: BRYCE, **47**.

SYSTEMATIC.

(*a*) Chaetognatha.

[Vacant.]

(*b*) Gastrotricha.

Macrodasys **gen. n.**, *buddenbrocki* **sp. n.**, an aberrant type, Kiel, REMANS Zool. Anz. **61** pp. 289-297 2 text-figs.

(*c*) Rotifera.

Rotifera, Devil's and Stump Lake, North Dakota, notes, BRYCE J. Quek. miscosc. Cl. ser. 2 **15** pp. 81-108 pl. iii.

Anuraea aculeata **var. n.** *curvispina*, E. Prussia, STEINECKE Schr. Ges. Königsberg **64** p. 44.

Colurella, Bory de St. Vincent, comparison of species pp. 177-189 7 text-figs., *C. gastracantha* sp. n. p. 177 text figs. 1 & 2, HAUER Zool. Anz. **59**.

Euchlanis deflexa Gosse, male, LEISSLING Zool. Anz. **59** pp. 48-51 1 text-fig.

Lecane lauterborni sp. n., Black Forest, HAUER Zool. Anz. **61** p. 145 text-figs. 1-3.

ANNELIDA, GEPHYREA, PHORONIDEA, PTEROBRANCHIATA.

SUBJECT INDEX.

COMPREHENSIVE AND GENERAL.

Miscellaneous.—*Technique*: LA RUE, **216**.

STRUCTURE.

General Anatomy. — *Chaetopoda*: CECCHINI, **55**; KOWALEWSKI, **202** & **203**; MCINTOSH, **227**; PRENANT, **308**; RIOJA, **320**.

Envelope, test.—MCINTOSH, **228**.

Integument, appendages. — FELDKAMP, **118**.

Alimentary System.—HEIDER, **165**; SMITH, **348**.

Excretory System.—BAHL, **17**.

Nervous System.—MEYER, **255**.

Circulatory System.—CECCHINI, **55**; PRENANT, **306** & **307**; STEPHENSON, **368**.

Blood and blood-pigments. — BARCROFT & BARCROFT, **18**; FOX, **126**.

Sexual Forms.—FELDKAMP, **118**.

Sexual organs and cells.—FAGE, **106**; JANDA, **181**; MALAQUIN, **232**; MEHRA, **250**.

Histology.—ABELOOS, **4**; HÄMMERLING, **156**; MEEK & STORROW, **244**; MEYER, **255**; SMITH, **348**; STEPHENSON, **368**.

Cytology.—ABELOOS, **1** & **2**; DEHORNE, **90** & **91**; SCRIBAN, **333**.

PHYSIOLOGY.

General.—DEKHUYZEN, **94**; FAURÉ-FREMIET, **109**.

Nutrition, Metabolism.—ABELOOS, **1** & **2**; ALSTERBERG, **7**; COPELAND & WIEMAN, **80**; SCRIBAN, **333**.

Excretion.—ABELOOS, **3**; WILCZYNSKI, **413**.

Chemistry of Cell.—PANTIN, **295**.

Respiration.—SHEARER, **338**.

Luminescence.—PIERANTONI, **301**.

Growth: age - processes. — STOLTE, **376**.

Regulation.—PENNERS, **298–300**.

Sexuality.—SVETLOV, **381**.

Maturation, Fertilization.—HERPIN, **167**; HÖRSTADIUS, **171**.

Oviposition.—BLEGVAD, **41**; HERPIN, **166**; MCINTOSH, **228**.

Environmental effects: Response to stimuli.—AUGENER, **12**; PANTIN, **295**.

Effects of Reagents.—HART, **159**.

REPRODUCTION AND DEVELOPMENT.

Life-cycle.—MESNIL & CAULLERY, **254**.

Asexual Multiplication.—AIYER, **6**; DEHORNE, **89**; HÄMMERLING, **155** & **156**.

Regeneration.—CONSOLI, **79**; HÄMMERLING, **156**; JANDA, **181**; MESNIL & CAULLERY, **254**.

Organogenesis.—KOWALEWSKI, **204**; MEHRA, **250**; PRENANT, **306** & **307**; STEPHENSON, **368**.

Histogenesis.—MICHEL, **260**; NUZUM & RAND, **287**;

Histolysis.—DEHORNE, **93**.

Metamorphosis.—FAGE, **106**.

Maturation, Fertilization. — FAURÉ-FREMIET, **109**.

Spermatogenesis, cogenesis.—FAURÉ-FREMIET, **109**; MALAQUIN, 232 & 233.

Embryogeny.—BLEGVAD, **41**; HERPIN, **168**; PENNERS, **298–300**; SCHMIDT, **327**.

Larval Forms.—MONRO, **270**; WOLTERECK, **415**.

ETHOLOGY.

Bionomics. — ALSTERBERG, **7**; FRIEND, **128**; GRAVIER, **147**; HERPIN, **166–168**; MEEK & STORROW, **244**; SOLOWIEW, **350**; THOMPSON, **394**.

Symbiosis.—ZIRPOLO, **424**.

VARIATION, PHYLOGENY.

Abnormalities. — PENNERS, **298**; LEIGH-SHARPE, **218**.

Phylogeny.—SCHMIDT, **327**.

DISTRIBUTION (GEOGRAPHY).

Geographical — *Europe*: FRIEND, **129**; MCINTOSH, **229**; MICHAELSEN, **257**; MONARD, **268**; MONRO, **269**; OBERMAYER, **290**. *Asia*: FISCHER, **125**; HARDING, **157**; MICHAELSEN, **258**; STEPHENSON, **371** & **372**; UDE, **405**. *Africa*: GODDARD, **140**; GRAVIER & DANTAN, **148**; MCINTOSH, **227**. *Australasia*: AUGENER, **14**; STEPHENSON, **369**. *America*: COCKERELL, **75**; SMITH, **349**; TREADWELL, **402**. *Atlantic*: DOLLFUS, **97**; FAUVEL, **117**. *Pacific*: AUGENER, **13** & **14**; MICHAELSEN, **259**. *Arctic*: STEPHENSON, **370**.

Geological.—*Tertiary*: FINLAY, **123**; WILCKENS, **411**. *Secondary*: TWENHOFEL, **404**. *Primary*: CLARKE, **68**; MCLEARN, **230**; PROUTY & SCHWARTZ; **309**; SEARIGHT, **334**.

SYSTEMATIC.

1. ANNELIDA.

(*a*) **Archiannelida.**

Dinophilus rostratus Schulz is a rhabdocoele Turbellarian, *Alaurina composita* Metschnikow; REISINGER Zool. Anz. **58** pp. 169 & 170.

(*b*) **Polychaeta.**

Polychaeta from the Auckland & Campbell Islands; AUGENER Videns Medd. **75** pp. 1–115 45 text-figs.

Polychaeta (Errantia) from New Zealand; AUGENER Videns. Medd. **75** pp. 241–441 11 text-figs.

Polychaeta, Atlantic, coasts of Guiana, etc.; FAUVEL Mem. Pont. Accad. Nuovi Lincei ser. 2 **6** pp. 89–147 8 text-figs.

Polychaeta, S. African coasts, with new forms; MCINTOSH Ann. Mag. Nat. Hist. ser. 9 **14** pp. 1–52.

Polychaeta, British marine (*Sabellidae—Serpulidae*) characters, synonymy, occurrence; MCINTOSH Monogr. Brit. mar. Annelids **4** Pt. ii pp. 251–538 pls. cxii–cxxxviii.

Polychaeta belonging to Fams. *Polynoidae, Sigalionidae, Eunicidae, Aphroditidae* and *Amphinomidae*, collected by H.M.S. "Alert," 1878–1882, with some new forms; MONRO J. Linn. Soc, Zool. **36** pp. 37–77 31 text-figs.

Andresia **gen. n.** (*Polynoidae*) *ampullifera* **sp. n.**, île Bréhat; PRENANT Bull. Soc. Zool. France **49** pp. 19–29 7 text-figs.

Aracoda debilis Ehl. **var. n.** *maorica*; AUGENER Vid. Medd. **75** p. 432.

†*Conularia twenhofeli* p. 37 pl. i figs. 13, 14, 16, pl. xxviii fig. 9, *honeymani* p. 38 pl. i figs. 9, 10, *antigonishensis* p. 38 fig. 15 **spp. n.** Silurian Nova Scotia; MCLEARN Mem. Geol. Survey Canada **137**.

†*Cornulites concavus* pl. xi figs. 1–4 *rosehillensis* fig. 5, p. 402, *cancellatus* p. 403 figs. 6, 7 **spp. n.**, Silurian; PROUTY & SCHWARTZ Maryland Geol. Surv. Stratigr. Mem. **1923**.—†*C. subdistans* **sp. n.** Silurian Nova Scotia; MCLEARN Mem. Geol. Surv. Canada **137** p. 40 pl. ii figs. 15–17.

Diopatra cuprea Bosc, post-larval stage; MONRO Ann. Mag. Nat. Hist. ser. 9 **14** pp. 193–199 6 text-figs.

†*Ditrupa parki* p. 448 text-fig. 1, *chapmani* p. 449 fig. 2 **spp. n.** Tertiary, New Zealand; FINLAY Trans. N. Zealand Inst. **55**.

Eunice franklini **sp. n.**, Arafura Sea; MONRO J. Linn. Soc. Zool. **36** p. 56 text-figs. 14 & 15.

Eunoa assimilis p. 6, *agnae, macrophthalma* p. 7 **spp. n.** S. African coasts; MCINTOSH Ann. Mag. Nat. Hist. ser. 9 **14.**

Euphrosyne maorica **sp. n.**, New Zealand; AUGENER Videns. Medd. **75** p. 259 text-fig. 1.

Harmothoe terminoculata **sp. n.**, Port Jackson; MONRO J. Linn. Soc. Zool. **36** p. 42 text-figs. 5, 6.

Lagisca crassa **sp. n.** Chile; TREADWELL Proc. U. S. Nat. Mus. **65** Art. 13 7 pp. 4 text-figs.

Lepidastheniella **gen. n.** (*Polynoidae*) p. 43, for *L. comma* (Thomson) & *L. phillippensis* **sp. n.** S. Australia; MONRO J. Linn. Soc. Zool. **36** p. 44.

Leptonereis glauca Clap., notes on; GRAVIER & DANTAN Bul. Mus. **1924** p. 469 4 text-figs.

Magalia capensis **sp. n.** p. 16; MCINTOSH Ann. Mag. Nat. Hist. ser. 9 **14.**

Mercierella enigmatica Fauvel, from London docks, described; MONRO Ann. Mag. Nat. Hist. ser. 9 **13** pp. 155–159 5 text-figs.—*M. e.* Fauvel, redescribed; RIOJA Bol. Soc. Esp. Hist. nat. **24** pp. 160–169 pl. v.

Neanthes funchalensis (Lang.), Bay of Algiers; GRAVIER & DANTAN Bul. Mus. **1924** p. 464 8 text-figs.

Nereis mortenseni **sp. n.**, Auckland Islands; AUGENER Vid. Medd. **75** p. 21 text-figs. 7–14.—*N.* (*Perinereis*) *ponuiensis* **sp. n.**, Auckland; AUGENER T.c. p. 349 text-figs. 5, 6.

Nerine capensis **sp. n.**, S. African coast; MCINTOSH Ann. Mag. Nat. Hist. ser. 9 **14** p. 38.

Nicidion imogena **sp. n.**, Brazil; MONRO J. Linn. Soc. Zool. **36** p. 61 text-figs. 22–24.

Nicolea maxima **sp. n.** Auckland Isl.; AUGENER Vid. Medd. **75** p. 96 text-fig. 38.

Notopygus andrewsi p. 73 text-figs. 5, 6, *horsti* p. 75 fig. 7 **spp. n.**; MONRO J. Linn. Soc. Zool. **36.**

Odontosyllis psammochroma **sp. n.** p. 386 text-fig. 7; AUGENER Vid. Medd. **75.**

Onuphis aucklandensis **sp. n.** p. 418 text-fig. 11; AUGENER T.c.

Palmyreuphrosyne pacifica **sp. n.** New Zealand; AUGENER T.c. p. 263 text-fig. 2.

Panthalis oerstedi var. *capensis* [var. n. ?]; MCINTOSH Ann. Mag. Nat. Hist. ser. 9 **14** p. 10.

'*Paralacydonia mortenseni* **sp. n.** p. 311 text-fig. 3'; AUGENER Vid. Medd. **75.**

Parmensis reticulata sp. n., S. African coast; MCINTOSH Ann. Mag. Nat. Hist. ser. 9 **14** p. 8.

Pherecardia parva **sp. n.**, China Sea; MONRO J. Linn. Soc. Zool. **36** p. 73.

Pisione germanica **sp. n.**, North Sea; AUGENER Videns. Medd. **75** p. 300.

Polymnia capensis **sp. n.** p. 44; MCINTOSH Ann. Mag. Nat. Hist. ser. 9 **14.**

Polynoe caputleonis **sp. n.** p. 7 MCINTOSH T.c.

Pontogenessa **gen. n.** (*Aphroditidae*) *obscura* **sp. n.**, China Sea; MONRO J. Linn. Soc. Zool. **36** p. 68 text-fig. 4.

Pontogenia mcintoshi **nom. nov.** for *Palmyra aurifera* Sav. of McIntosh, 1885; MONRO T.c. p. 67 text-fig. 3.

Prionospio aucklandica **sp. n.**; AUGENER Vid. Medd. **75** p. 69 text-fig. 24.

†*Serpula craginı* **sp. n.**, Cretaceous Kansas; TWENHOFEL Bull. State geol. Surv. Kansas **9** p. 52 pl. vii fig. 1.—†*S. mirifica* **sp. n.** Tertiary, Kii; Japan J. Geol. Geogr. **2** p. 58 pl. vi fig. 14.—†*S.* (*Tubulostium* ?) *cockburnensis* sp. n., Tertiary; WILCKENS Further Zool. Res. Swedish Antarct. Exped. 1901–1903 **1** No. 5 p. 13 pl. i figs. 20–23.

Sigalion ovigerum **sp. n.**, Port Jackson; MONRO J. Linn. Soc. Zool. **36** p. 147 text-figs. 10–12.

Spirorbis monacanthus **sp. n.** Auckland Isl.; AUGENER Vid. Medd. **75** p. 112 text-figs. 44, 45.

Sthenelais variabilis Potts var. n. *colorata*, Port Denison; MONRO J. Linn. Soc. Zool. **36** p. 52.

†*Terebella harefieldensis* **sp. n.**, Cretaceous; WHITE Proc. Geol. Ass. **34** 1923 p. 44.

Travisiopsis capensis **sp. n.** p. 15; MCINTOSH Ann. Mag. Nat. Hist. ser. 9 **14**.

†*Tubulostium* cf. *discoideum* Stol., Senonian, New Zealand, an Annelid; WILCKENS Trans. N.Z. Inst. 55 p. 543 pl. liv fig. 8.

(*c*) Myzostomida.

[Vacant.]

(*d*) Oligochaeta.

Oligochaeta from New Zealand, Auckland & Campbell Isl.; MICHAELSEN Videns. Medd. **75** 1924 pp. 197–240 8 text- figs.

Oligochaeta India & Burma, with new forms; STEPHENSON Rec. Ind. Mus. **26** pp. 317–365 pls. xxi–xxiii.

Oligochaetes from the Volga; MICHAELSEN Arb. biol. Wolga-Station **7** pp. 30–43.

Earthworms, British, key to identification & descriptive notes; FRIEND **1923** 64 pp. 1 pl. & 28 figs. in text.

Allolobophora (*Eiseniella*) *tetraedra* **var. n.** *sewelli* Palestine; STEPHENSON Rec. Ind. Mus. **26** p. 363.

Amphichaeta leydigi (Tauber 1879) M. Kowalewski 1910, note & comparison with *A. sannio*; KOWALEWSKI Bull. intern. Acad. Cracovie **1916 B** pp. 77–80 4 text-figs.

Aphanascus **gen. n.** (*Megascolecidae*) *oryzivorus* **sp. n.**, Malabar; STEPHENSON Rec. Ind. Mus. **26** p. 360 pl. xxiii figs. 40–42.

Diplocardia indica **sp. n.** p. 353 pl. xxii fig. 35; STEPHENSON T.c.—*D.* (*Aleodrilus*) *keyesi* (Eisen) **var. n.** *texensis*; SMITH Proc. U. S. Nat. Mus. **66** art. 12 p. 2.—*D. mississippiensis* p. 41, pl. xi, *floridana* p. 45 pl. xii **spp. n.**; & notes on calciferous glands; SMITH Illinois Biol. Monogr. **9** No. 1.

Drawida troglodytes **sp. n.**, Garo Hills, Assam; STEPHENSON Rec. Ind. Mus. **26** p. 129.—*D. fluviatilis* p. 325 pl. xxi fig. 3, *nandiensis* p. 326 fig. 4 **spp. n.**, *D. barwelli* Bedd. **var. n.** *hehoensis* p. 324, Burma; STEPHENSON T.c.

Enchytraeus cavicola **sp. n.** p. 127, pl. vi figs. 1–4 Garo Hills, Assam; STEPHENSON T.c.—*E. eltoni* p. 211, *liefdeensis* p. 213, *muscicola* p. 214 **spp. n.** Spitzbergen; STEPHENSON Ann. Mag. Nat. Hist. ser. 9 **13**.

Erythraeodrilus mullani p. 348 pl. xxii figs. 30, 31, *khandalaensis* p. 350 figs. 32–34, with **form. n.** *dichordarius* p. 352, **spp. n.** Bombay; STEPHENSON Rec. Ind. Mus. **26**.

Eudichogaster matheranensis **sp. nov.** Bombay: STEPHENSON T.c. p. 346 pl. xxii fig. 24.

Glyphidrilus spelaeotes **sp. n.** Garo Hills, Assam; STEPHENSON T.c. p. 133.

Hesperodrilus litoralis, **sp. n.** Campbell Isl.; MICHAELSEN Vid. Medd. **75** p. 208 text-fig. 1.

Malabaria **gen. n.** *paludicola* **sp. n.** (Fam. *Megascolecidae*) p. 356 pl. xxiii figs. 36–39; STEPHENSON Rec. Ind. Mus. **26**.

Maoridrilus intermedius **sp. n.**, New Zealand; MICHAELSEN Vid. Medd. **75** p. 221 text-fig. 3.

Marionina tatrensis **sp. n.**, Poland; KOWALEWSKI Bull. intern. Acad. Cracovie **1916 B** pp. 1 & 2 1 text-fig.

Megascolex mortenseni New Zealand **sp. n.** p. 234 text-fig. 8; MICHAELSEN Vid. Medd. **75**.—*M. porphyrozonus* **sp. n.** p. 337 pl. xxii figs. 21, 22, *M. sylvicola* (Mich.) **var. n.** *marianae* p. 336 figs. 19, 20; STEPHENSON Rec. Ind. Mus. **26**.

Megascolides antrophyes **sp. n.** Garo Hills, Assam; STEPHENSON T.c. p. 130 pl. vi figs. 5, 6.

Nais behningi **sp. n.**, Volga; MICHAELSEN Arb. biol. Wolga-Station **7** p. 34 1 text-fig.

Notoscolex palniensis **sp. n.** p. 333 pl. xxi figs. 14–16, India; STEPHENSON Rec. Ind. Mus. **26**.

Pelodrilus africanus **sp. n.**, Cape Province; GODDARD Trans. R. Soc. S. Africa **12** p. xii.—*P. bipapillatus* **sp. n.** Stewart Isl.; MICHAELSEN Vid. Medd. **75** p. 213 text-fig. 2.

Perionyx (*Diporochaeta*) *duodecimalis* **sp. n.** Auckland Isl. p. 229 text-fig. 6; MICHAELSEN T.c.—*P. horai* **sp. n.** p. 342 pl. xxii fig. 23; STEPHENSON

Rec. Ind. Mus. **26**.—*P. lacustris* **sp. n.** Tasmania; STEPHENSON Ann. Mag. Nat. Hist. ser. 9 **14** p. 546.

Pheretima bifaria p. 18 text-figs. 1, 2, *doormani* p. 20 fig. 3, *heurni* p. 23 fig. 5, *vialis* p. 25 fig. 6, **spp. n.** Dutch New Guinea; MICHAELSEN Nova Guinea **15** Zool. Livr. **1**.—*P. heterochaeta* (Mchlsn.) morphology, with special reference to the circulatory system; CECCHINI Arch. Zool. ital. **8** pp. 7–47 pl. ii.—*P. parmata* p. 80, *sepikensis* p. 81, *büntei* p. 82, *turneri* p. 83, *schultzei* p. 83, *collini*, *tamiensis* p. 84, *freesei* p. 85 **spp. n.** New Guinea; UDE Zool. Anz. **61**.—*P. suctoria* (Mich.) var. *mullani* **var. nov.**, India; STEPHENSON Rec. Ind. Mus. **26** p. 340.

Plagiochaeta stewartensis **sp. n.**; MICHAELSEN Vid. Medd. **75** p. 223 text-fig. 4.

Plitellus kempi **sp. n.** p. 327 pl. xxi figs. 5, 6, *campsiaulus* p. 328 fig. 7 **spp. n.** India; STEPHENSON Rec. Ind. Mus. **26**.

Ramiella parva **sp. n.**, Burma; STEPHENSON T.c. p. 344 pl. xxii figs. 25–28.

Spenceriella kempi **sp. n.** India; STEPHENSON T.c. p. 332.

Tubifex montanus **sp. n.**, Tatra; KOWALEWSKI Bull. Acad. Cracovie **1918 B** p. 131 pl. ix figs. 3–5.

Woodwardia healesi **sp. n.**, p. 227 text-fig. 5; MICHAELSEN Vid. Medd. **75**.

(*e*) Hirudinea.

Helobdella nociva **sp. n.** India; HARDING Ann. Mag. Nat. Hist. ser. 9 **14** p. 492 pl. xi.

Paraclepsis **gen. n.** (*Glossosiphonidae*) *praedatrix* p. 495 pl. xiv, *vulnifera* p. 497 pl. xv **spp. n.** India; HARDING T.c.

Placobdella undulata p. 493 pl. xii Ceylon, *fulva* p. 494 pl. xiii, India, **spp. n.**; HARDING T.c.

Pontobdella loricata p. 490 pl. ix, India, *aculeata* p. 491 pl. x, Burma **spp. n.**; HARDING T.c.

(*f*) Echiuroidea.

[Vacant.]

2. GEPHYREA (SIPUNCULOIDEA).

Phascolosoma trybomi Théel considered as at most a variety of *P. margaritaceum* Sars; FISCHER Zool. Anz. **58** pp. 69–74 2 text-figs.

Thalassema mortenseni **sp. n.** Gulf of Siam; FISCHER Videns. Medd. **76** p. 25 text-figs. 1–3.

3. PHORONIDEA.

[Vacant.]

4. PTEROBRANCHIATA.

[Vacant.]

VII. BRACHIOPODA AND BRYOZOA

BY

H. M. MUIR WOOD, M.Sc.

(a) BRACHIOPODA

CONTENTS.

	PAGE
I. Titles	1
II. Subject Index	5
III. Systematic Index	6

I.—TITLES.

Arnold, R. *vide* Clark, B. L.

1.—Bataller, J. R. Adiciones al trabajo titulado "Sintesis paleontológica del Carbonífero espãnol. Bol. soc. Esp. Hist. Nat. Madrid **24** 5 1924 pp. 227–232.

2.—Böhm, J. Uber eine senone Fauna von Misol. Paläont. Timor Stuttgart **14** 24 1924 p. 101.

3.—Boswell, P. G. H. The Faunal Relations of the Crag Deposits of the Bentley district, Suffolk. Proc. Geol. Ass. London **35** 1924 pp. 212–220.

4.—Branson, E. B. The Devonian of Missouri. Missouri Bureau Geol. Rolla (2) **17** 1922 pp. 71–110 13 pls.

5.—Branson, E. B. and Williams, J. S. Fauna of the Middle Devonian of south-eastern Missouri. Missouri Bureau Geol., Rolla (2) **17** 1922 pp. 132–149 5 pls.

Chumley, J. *vide* Murray, J.

6.—Clark, B. L. and Arnold, R. Fauna of the Sooke Formation, Vancouver Island. Univ. Cal. Pub. Geol. Berkeley **14** 5 1923 pp. 176–177 pls. 32, 36.

7.—Cobbold, E. S. Appendix—The Cambrian Fossils from the Breccia Material in the Cores of the Boring at Nechells Gas-Works, Birmingham. Q. J. Geol. Soc. London **80** 1924 pp. 365–367.

8.—Collet, L. W. & Paréjas, E. Stratigraphie du sédimentaire autochtone de la Jungfrau. I. Bajocien-Bathonien. Callovien. C.R. Soc. Phys. Hist. Nat. Genève **38** 1921 pp. 76–79.

9.—Corroy, G. Molières Gammal. Saint-Ambroix. Excursion du 13 Septembre. Bul. soc. géol. Paris **23** 1924 pp. 473–481.

10.—Corroy, G. Brouzet. La Serre du Bouquet. Seijnes. Klippe de la Liquiere. Excursion du 15 Septembre. Bul. soc. géol. Paris **23** 1924 pp. 484–487.

11.—Cossmann, M. Rectifications de nomenclature. Rev. crit. paléozool. Paris **24** 1920 p. 137.

12.—Couffon, O. Le Bajocien et le Bathonien en Maine-et-Loire. Bul. soc. d'Et. Sci. d'Angers **53** 1924 pp. 69–86.

Cox, A. H. *vide* Thomas, H. H.

13.—Cox, L. R. A Triassic Fauna from the Jordan Valley. Ann. Mag. Nat. Hist. London **14** 1924 pp. 52–96 2 pls.

14.—Dalloni, M. Contribution a l'étude des terrains tertiaires de la Thessalie et de l'Épire. Bul. soc. géol. Paris **23** 1924 pp. 284–294.

15.—Dautzenberg, P. Brachiopodes in **Dollfus,** R. P. Contribution à la faune des Invertébrés du banc de Rockall. Bul. Inst. Océan. Monaco. **438** 1924 p. 17.

16.—Davies, A. M. Type-Specimens. Geol. Mag. London **61** 1924 pp. 527–528.

17.—Demanet, F. Le Waulsortien de Sosoye. Mem. Inst. Géol. Univ. Louvain **2** 1921–23 pp. 39–284 pls. iii–xiv.

18.—Derjugin, K. Das Barents-Meer längs dem Kola-Meridian. Intern. Rev. Hydrobiol. Leipzig **12** 1924 p. 159.

19.—Dietrich, W. O. Zur Paläontologie und Stratigraphie der Kreide und des Tertiärs in der ostkaribischen Kordillere Venezuelas. Centralbl. Min. Stuttgart **1924** 6 pp. 17–187.

20.—Eaton, H. N. A Vernon Shale (Silurian) Fauna in Central New York. Bul. New York State Mus. Albany **253** 1924 pp. 111–114 1 pl.

21.—Eyerdem, W. Marine Shells of Drier Bay, Knight Island, Prince William Sound, Alaska. Nautilus, Boston, Mass. **38** 1924 pp. 22–28.

22.—Finlay, H. J. Two new species of *Magadina.* Trans. Proc. N. Zeal. Inst. Wellington **55** 1924 pp. 532–533 2 text figs.

23.—Frédérics, G. [Фредериксъ, Г.] Notes Paléontologiques. I. Sur les *Productus* du Carbonifère supérieur et de l'Artinskien. Палеонтологическія замѣтки. I. Къ познанію верхне-каменноугольныхъ и артинскихъ. *Productus.* Mem. Com. Géol. Petrograd **103** 1915 pp. 1–63 5 pls. & text figs. [Resumé in French.]

24.—Frédérics, G. [Фредериксъ, Г.] La Faune paléozoique supérieure des environs de la ville de Krasnooufimsk. Фауна верхнепалеозойской толши окрестностей города красноуфимска пермской губ. Mém. Com. Géol. Petrograd **109** 1915 pp. 1–17 10 pls.

25.—Frédérics, G. [Фредериксъ, Г.] Note sur la structure de l'appareil apical chez quelques Brachiopodes testicardines. [Замѣтка о строеніи апикальнаго аппарата]. Brachiopoda testicardines. Bull. Acad. Sci. Russie Petrograd **12** 1918 pp. 2317–2324.

26.—Frédérics. G. [Фредериксъ, Г.] Etudes paléontologiques. 3. Sur les types de la sculpture des Brachiopodes. Палеонтологическіе этюды. 3. О скульптурных типах брахиопод. Bull. Com. Géol. Petrograd **39** 1924 pp. 419–433.

27.—Frédérics. G. [Фредериксъ, Г.] Upper Paleozoic of the Ussuriland. I. Brachiopoda. Уссурийский верхний палеозой. Rec. Geol. Com. Russ. Far East no. **28** 1924 pp. 1–52 1 pl. 4 text figs. [Summary in English.]

28.—Garwood, E. J. & **Goodyear,** E. The Lower Carboniferous Succession in the Settle District and along the Line of the Craven Faults. Q. J. Geol. Soc. London **80** 1924 pp. 184–273 pls. x–xxi.

29.—Gaster, C. T. A. The Chalk of the Worthing District, Sussex. Proc. Geol. Ass. London **35** 1924 pp. 89–110.

Goodyear, E. *vide* Garwood, E. J.

30.—Gregorio, A. de. Monografia dei fossili Titonici di "Casale di Sopra" (Busambra) conservati nel nico privato gabinetto. (Zona a *Terebratula diphya* e *janitor.*) Ann. Géol. Pal. Palermo (Turin) **36** 1922 pp. 22–24 pl. xii.

31.—Hägg, R. Svenska Kritbrachiopoder och Kritmollusker i Hisingers Samling. Ark. Zool. Stockholm **16** 1924 pp. 1–5.

32.—Hayasaka, I. Some Permian Fossils from the Kitakami Mountains. Japan J. Geol. Geogr. Tokio **2** 4 1923 pp. 107–116 1 pl.

33.—Hayasaka, I. A Palaeontological Note on *Hemithyris psittacea* Gmelin var *woodwardi* Adams from some Localities in Japan. Japan J. Geol. Geogr. Tokio **2** 4 1923 pp. 117–120.

34.—Hayasaka, I. On the Fauna of the Anthracolithic Limestone of Ômi-Mura in the Western Part of Echigo. Sci. Rep. Tohoku Imp. Univ. Sendai **8** 1 1924 pp. 1–83 pls. v–vii.

35.—Hewitt, H. D. Notes on some Chalk Sections in the district around Thetford, Norfolk. Proc. Geol. Ass. London **35** 1924 pp. 220–244.

36.—Hudson, R. G. On the Rhythmic Succession of the Yoredale Series in Wensleydale. Proc. Yorks. Geol. Soc. **20** 1 1923–24 pp. 125–135.

37.—Jakovlev, N. N. [Яковлева, Н. Н.] О превращении. *Chonetes* В *Productella*. Sur la voie de la transformation du genre *Chonetes* en *Productella* Bul. Acad. Sci. Russ. Petrograd **14** 1920 pp. 261–266.

38.—Jarosz, J. Fauna wapienia węglowego w okręgu krakowskim. Brachiopoda. Część 1. Fauna des Kohlenkalks in der Umgebung von Krakau. Brachipoda I. Teil. Bul. Intern. Akad. Kraków **1914** 7B pp. 687–709 5 pls.

39.—Jarosz, J. Fauna wapienia węglowego w okręgu krakowskim. Brachipoda. Część II. Fauna des Kohlenkalks in der Umgebung von Krakau. Brachiopoden II. Teil. Bul. Intern. Acad. Kraków **1917** 3B pp. 61–101 4 pls. 2 text figs.

40.—Jarosz, J. Studja nad dewonem okręgu krakowskiego. Część I: Górny Famennien w okolicy Dębnika.—Studien über das Krakauer Devon. 1 Teil. Das obere Famennien in der Umgebung von Dębnik. Bul. Intern. Acad. Krakow **1918** B pp. 85–130 pls. vii–viii.

41.—Jimenez de Cisneros. *Pygope janitor* Pict., en él Barremiense de la Alcovaya. Bol. Soc. Esp. Hist. Nat. Madrid **24** 5 1924 pp. 260–261.

42.—Jiménez de Cisneros, D. Encuento de otro yacimiento de Lías alpino en el barranco de las Cuevas, al W. de la Romana (Alicante). Bol. Soc. Esp. Hist. Nat. Madrid **24** 5 1924 pp. 261–262.

43.—Jimenez de Cisneros, D. Noticia acerca de algunos fósiles liásicos encontrados en la Solana del Algarejo. Bol. Soc. Esp. Hist. Nat. Madrid **24** 8 1924 pp. 375–377.

44.—Jimenez de Cisneros, D. Breve noticia de los yacimientos del Collado de la Campana. Bol. Soc. Esp. Hist. Nat. Madrid **24** 8 1924 pp. 377–378.

45.—Jimenez de Cisneros, D. Encuentro de la especie *Pygope cornicolona* Canav. en el Liásico del Cerro de Ayala (Alicante). Bol. Soc. Esp. Hist. Nat. Madrid **24** 9 1924 pp. 415–416.

46.—Kindle, E. M. Three new Devonian Fossils from Alberta. Pan-Amer. Geol. Des Moines **42** 1924 pp. 217–218 1 pl.

47.—Kloucek, C. Nové Zprávy z vrstev Komárovských d β (Dd & β). Sbornik Statn. Geol. Prage **4** 1924 pp. 199–204 1 text fig. (Resumé in French.)

48.—Koliha, J. Atremata z krušnohorských Vrstev-d α. Pal. Bohemiae, Prague **10** 1924 pp. 1–61 2 pls. 8 text figs. (Resumé in French.)

49.—Krumbeck, L. Die Brachiopoden, Lamellibranchiaten und Gastropoden der Trias von Timor II. Paläont. Timor Stuttgart **13** 22 1924 pp. 1–38 3 pls

50.—Lang, W. D. The Blue Lias of the Devon and Dorset Coasts. Proc. Geol. Ass. London **35** 1924 pp. 169–185 1 pl.

51.—Lee, G. W. On the Faunal Sequence of the Carboniferous Rocks met in the Roddymoor Boring, Co. Durham. Summ. Progress Geol. Surv. London for **1923** 1924 pp. 146–149.

52.—Lehner, L. Die Gliederung der fränkischen albüberdeckenden Kreide. Centralbl. Min. Stuttgart **1924** 6 pp. 176–181.

53.—Leuthardt, F. Die Fossilien des Burgenschnittes bei Liestal. Eclogae. Geol. Helvet. Lausanne **18** 1923 pp. 300–303.

54.—Lewinski, J. Monographie géologique et paléontologique du Bononien de la Pologne. Mém. Soc. Géol. Paris Pal. **24** 56 1923 pp. 1–56 pl. viii.

55a.—McLearn, F. H. The Silurian Arisaig Series of Arisaig, Nova Scotia. Am. J. Sci. New Haven Conn. **45** 1918 pp. 126–140. [Omitted from 1918 record.]

55.—McLearn, F. H. Palaeontology of the Silurian Rocks of Arisaig, Nova Scotia. Mem. Geol. Surv. Canada, Ottawa **137** 1924 pp. 43–91 pls. ii–x.

56.—McLellan, R. D. The Devonian Orcas Group of Washington. Amer. J. Sci. New Haven Conn. **8** 1924 pp. 217–222.

Malychef, V. *vide* Weber, G.

57.—Milon, M. Y. Sur la faune et l'âge des Calcaires waulsortiens de Saint-Pierre-la-Cour (Mayenne). C. R. Soc. Sci. Paris **179** 1924 pp. 1174–1176.

58.—Mitchell, J. A Further Reference to the Occurrence of *Merista plebeia* Sowerby in New South Wales. Proc. Linn. Soc. N. S. Wales, Sydney **49** 1924 pp. 499–503 1 pl.

59.—Mortensen, T. The Danish Expedition to the Kei Islands 1922. Videns. Medd. nat. For. Kjöbenhavn **76** 1923 pp. 56–99.

60.—Müller, W. Die Faune der Frasne-Stufe bei Almaden in der Sierra Morena. Senckenbergiana, Frankfurt a. M. **6** 1924 pp. 226–228.

61,—Murray, J. and **Chumley,** J. The Deep-sea Deposits of the Atlantic Ocean. Trans. R. Soc. Edinbugh **54** 1924 p. 248.

62.—Oldroyd, I. S. Marine Shells of Puget Sound and Vicinity. Publ. Puget Sound Biol. St. Seattle **4** 1924 pp. 202–206 pls. xxvii–xxix.

Paréjas, E. *vide* Collet, L. W.

63.—Penndorf, H. Zur Gliederung der Ceratitenschichten in Niederhessen. N. Jahrb. Min. Stuttgart **1924** 2 pp. 50–53.

64.—Petkovic, V. K. [Петковиħа, В. К.] Sur les couches urgoniennes de Colakov Kamen et Kamenjar près de Boljevac en Serbie orientale. О. Ургонским слојевима на чолаковом камену и камењару код Бољевца. Ann. Géol. Balkan Belgrade **7** 1 1922 pp. 62–66. (Resumé in French.)

65.—Poulsen, C. Bornholms Olenuslag og deres Fauna. Com. Paleont. Mus. Mineral. Geol. Univ. Copenhague **20** 1923 pp. 54–56.

Pringle, J. *vide* Pruvost, P.

66.—Prouty, W. F. and **Swartz,** C. K. "Brachiopoda" in Systematic Palaeontology. Maryland Geol. Surv. Strat. Mem. Silurian. Baltimore **1923** pp. 412–467 pls. xv–xxvii.

67.—Pruvost, P. and **Pringle,** J. A Synopsis of the Geology of the Boulonnais including a Correlation of the Mesozoic Rocks with those of England. Proc. Geol. Ass. London **35** 1924 pp. 29–67 2 pls.

68.—Savage, T. E. Richmond Rocks of Iowa and Illinois. Amer. J. Sci. New Haven Conn. **8** 1924 pp. 411–427.

69.—Scalia, S. Puo la *Calceola sandalina* Lam. essere ragionevolmente considerata come un polipaio fornito di opercolo? Bol. Soc. geol. ital. Roma **41** 1922 pp. 81–99 5 text figs.

70.—Scupin, H. Der chronologische Wert der Leitfossilien. Centralbl. Min. Stuttgart **1923** pp. 370–383, 400–414, 433–447.

71.—Smyth, L. B. Report on the Palaeozoology of the Ballycastle Coalfield: in Wright W.B. The Geology of the Ballycastle Coalfield. Mem. Geol. Surv. Ireland **1924** pp. 100–113.

72.—Sokolov, D. N. [Соколова, Д. Н.] Коллекція окаменѣлостей съ острововъ Преображенія и Бѣгичева. Trav. Mus. Géol. Pierre le Grand Petrograd **8** 1916 pp. 175–178.

73.—Stamp, L. D. The Base of the Devonian (Supplementary Note). Geol. Mag. London **61** 1924 pp. 351–355.

74.—Stewart, G. A. The Fauna of the Little Saline Limestone in Ste Genevieve County. Missouri Bureau Geol. Rolla (2) **17** 1922 pp. 228–252 pls. lxi–lxvi.

75.—Stieler, C. Uber die oberliassische "Schwarze Kreide" von Vehrte bei Osnabrück. Zs. D. geol. Ges. Berlin **75** 1923 pp. 76–106.

76.—Stoyanow, A. [Стояновъ, А.] On some Permian Brachiopoda of Armenia. О нѣкоторыхъ пермскихъ Brachiopoda арменіи. Mém Com. Géol. Petrograd **111** 1915 pp. 1–95 6 pls. (Resumé in English.)

Swartz, C. K. *vide* Prouty, W. F.

77.—Tansey, V. O. The Fauna and the Correlation of the Bailey Limestone in the Little Saline Creek area of Ste. Genevieve County, Missouri. Missouri Bureau Geol. Rolla (2) **17** 1922 pp. 182–204 pls. xliv–liii.

78.—Thomas, A. O. Some Fossils from an Outcrop in Des Moines. Proc. Iowa Acad. Sci. Des Moines **30** 1923 pp. 471–479 2 pls.

79.—Thomas, H. H. and **Cox,** A. H. The Volcanic Series of Trefgarn, Roch and Ambleston (Pembrokeshire). Q. J. Geol. Soc. London **80** 1924 pp. 520–548.

80.—Thompson, B. The Geology of Road Cutting. Geol. Mag. London **61** 1924 pp. 210–218 2 pls.

81.—Tschernyschew, T. N. [Чернышевъ, Ѳ. Н.] Die Fauna des oberpalaeozoischen Ablagerungen des Darvas I. Фауна верхнепалеозойскихъ отложеній дарваза. Mém. Com. Géol. Petrograd **104** 1914 pp. 42–66 pls. 2–10. (Resumé in German.)

82.—Vollrath, P. Beiträge zur Stratigraphie und Paläogeographie des fränkischen Wellengebirges. Centralbl. Min. Stuttgart B-B **50** 1924 pp. 120–288 3 pls.

83.—Walcott, C. D. Cambrian Geology and Paleontology IV. no. 8 Nomenclature of some Post Cambrian and Cambrian Cordilleran Formations. Smithsonian Misc. Coll. Washington **67** 8 1923 pp. 457–476.

84.—Walcott, C. D. Cambrian Geology and Paleontology IV. No. 9 Cambrian and Ozarkian Brachiopoda. Smithsonian Misc. Collect. Washinton **67** 9 1924 pp. 477–554 pls. 106–125.

85.—Walcott, C. D. Cambrian Geology and Palaeontology V. No. 1 Geological Formations of Beaverfoot-Brisco-Stanford Range, British Columbia, Canada. Smithsonian Misc. Coll. Washington **75** 1 1924 pp. 1–51.

86.—Wallis, F. S. The Avonian of Cannington Park, near Bridgwater, Somerset. Geol. Mag. London **61** 1924 pp. 218–225.

87.—Weber, G. and **Malychef,** V. Sur la Stratigraphie du Mésocrétacé et du Néocrétacé de la Crimée. Bul. Soc. Géol. France Paris **23** 1923 pp. 193–204.

88.—Wilckens, O. Die Trias von Neuseeland. Zs. D. geol. Ges. Berlin **74** 1922 pp. 330–332.

Williams, J. S. *vide* Branson, E. B.

89.—Yanishevsky, M. [Янишевскаго, М.] Les schistes argileux près de la ville de Tomsk. Глинистые сланцы, выступающіе околог томска. Mém. Com. Géol. Petrograd **107** 1915 pp. 1–96 8 pls. (Resumé in French.)

90.—Yanishevsky, M. [Янишевскій, М.] Materials for the study of the Lower Carboniferous Fauna of Fergana. Матеріалы къ изученію нижнекаменноугольной фауны Ферганы. Mém. Com. Géol. Petrograd **162** 1918 pp. 1–142 8 pls.

II.—SUBJECT INDEX.

STRUCTURE.

Tshernyschewia, Richthofenia & *Scacchinella,* STOYANOW, **76**; *Calceola sandalina* compared with *Stropheodonta* ETC. SCALIA, **69**; General, FRÉDÉRICS, **25, 26.**

AETIOLOGY.

JAKOVLEV, **37.**

DISTRIBUTION.

(*a*) Recent.

Barents Sea, Arctic Regions, Derjugin, **18**; Atlantic Ocean, Murray & Chumley, **61**; Rockall, Dautzenburg, **15**; Malay Archipelago, Mortensen, **59**. Puget Sound, Oldroyd, **62**.

(*b*) Fossil.

Palaeozoic.—Russia, Frédérics, **24**; Siberia, Frédérics, **27**; Turkestan, Tschernyschew, **81**.

Cambrian.—England, Cobbold, **7**; Thomas & Cox, **79**; Bornholm, Poulsen, **65**; Bohemia, Kloucek, **47**; Koliha, **48**; U.S.A., Walcott, **83, 84, 85**.

Ordovician.—U.S.A., Savage, **68**; Walcott, **84**.

Silurian.—U.S.A., Eaton, **20**; Prouty & Swartz, **66**; Nova Scotia, McLearn, **55a, 55**.

Devonian.—France, Stamp, **73**; Boulonnais, Pruvost & Pringle, **67**; Spain, Müller, **60**; Poland, Jarosz, **40**; U.S.A., McLellan, **56**; Canada, Kindle, **46**; U.S.A., Branson, **4**; Branson & Williams, **5**; Stewart, **75**; Tansey, **77**; Australia, Mitchell, **58**.

Carboniferous.—England, Garwood & Goodyear, **28**; Lee, **51**; Wallis, **86**; Hudson, **36**; Ireland, Smyth, **71**; France, Milon. **47**; Ferghana, Asiatic Russia, Yanischevsky, **90**; Boulonnais, Pruvost & Pringle, **67**; Spain, Bataller, **1**, Russia, Frédérics, **23**; Jakovlev, **37**. Poland, Jarosz, **38, 39**. U.S.A., Thomas, **78**;

Permio-Carboniferous.—Japan, Hayasaka, **34**.

Permian.—Armenia, Stoyanow, **76**; Japan, Hayasaka, **32**.

Trias.—Germany, Penndorf, **63**; Vollrath, **82**; New Zealand, Wilckens, **88**; Jordan Valley, **Cox, 13**; Timor, Krumbeck, **49**.

Jurassic.—England, Thompson, **80**; Lang, **50**; France, Corroy, **9, 10**; Couffon, **12**; Boulonnais, Pruvost & Pringle, **67**; Spain, Jimenez de Cisneros, **42-44**, Poland, Lewinski, **54**; Germany, Stieler, **75**; Italy, Gregorio, **30**; Switzerland, Collet & Paréjas, **8**; Leuthardt, **53**.

Cretaceous.—England, Gaster, **29**; Hewitt, **35**; Scania, Sweden, Hägg, **31**; Spain, Jimenez de Cisneros, **41**; France, Corroy, **9, 10**; Boulonnais, Pruvost & Pringle, **67**; Servia, Petkovic, **64**; Crimea, Weber & Malychef, **87**; Germany, Lehner, **52**; Misol I, Malay Archipelago, Böhm, **2**; Venezuela, Dietrich, **19**.

Tertiary.—Japan, Hayasaka, **33**; Greece, Dalloni, **14**; Venezuela, Dietrich, **19**.

Oligocene or Miocene.—Vancouver I., Clark & Arnold, **6**.

Miocene.—New Zealand, Finlay, **22**.

Pliocene.—England, Boswell, **3**.

III.—SYSTEMATIC INDEX.

Note.—Classification according to C. Schuchert in Zittel-Eastman Textbook of Palaeontology 2nd ed. 1913.

ATREMATA.

OBOLACEA.

Obolidae.

†*Lingulella insons* Barr. var. *lata* **var. n.**, *bukovensis* **sp. n.** Cambrian Bohemia, Koliha Pal. Bohemiae **10** 1924 p. 30.—†*L. ibicus* p. 491, *miltoni, mechos* p. 492, *nepos, nerva* p. 493, *ninus, remus* p. 494, *siliqua* p. 495, *waptaensis* p. 496 **spp. n.** Cambrian & Ordovician Canada, *arctica* **sp. n.** p. 524 Cambro-Ordovician Novaya Zemlya, Walcott Smithsonian Misc. Collect. Washington **67** 9.

†*Lingulepis nabis* **sp. n.** Cambro-Ordovician Canada, Walcott Smithsonian Misc. Collect, **67** 9 p. 489.

†*Obolus ion* p. 482, *myron, perone* p. 484, *teuta* p. 486, *whymperi* p. 487 **spp. n.** Cambrian Canada, Walcott Smithsonian Misc. Collect. **67** 9.—†*O. complexus* var. *punctatus* **var. n.** Cambrian Bohemia, Kloucek Sbornik Prague **4** 1924 p. 201.

†*Obolus* (*Fordinia*) *nestor* **sp. n.** Cambrian Canada, WALCOTT Smithsonian Misc. Collect. **67** 9 p. 488.

†*Obolus* (*Lingulobolus*) *feistmanteli* (Barr.) var *Barrandei prima* **var. n.** Cambrian Bohemia, KOLIHA Pal. Bohemiae **10** 1924 p. 19.

†*Obolus* (*Westonia*) *ollius, tertia* **spp. n.** Cambrian Canada, WALCOTT Smithsonian Misc. Collect. **67** 9 p. 487.

†*Paterula prima* **sp. n.** Cambrian Bohemia, KLOUCEK Sbornik Prague **4** 1924 p. 202.

LINGULACEA.

LINGULIDAE.

†*Lingula vernoni* **sp. n.** Silurian U.S.A., EATON Bul. New York State Mus. Albany **253** 1924 p. 114.—†*L. clarki* p. 412, *subtruncata*, (?) **sp. n.**, p. 413 Silurian U.S.A., PROUTY Maryland Geol. Surv. Strat. Mem. **1923.**—†*L. subacutirostris* **sp. n.** Silurian Nova Scotia, MCLEARN Mem. Geol. Surv. Canada **137** 1924 p. 44.

†*Lingula* (*Palaeoglossa*) *distornata* **sp. n.** Silurian Nova Scotia, MCLEARN Mem. Geol. Surv. Canada **137** 1924 p. 46.

NEOTREMATA.

ACROTRETACEA.

ACROTRETIDAE.

†*Acrotreta atticus* p. 496, *discoidea* p. 497 Cambro-Ordovician, Canada, WALCOTT, Smithsonian Misc. Collect. **67** 9.

†*Acrothyra gregaria* **sp. n.** Cambrian Canada, WALCOTT, Smithsonian Misc. Collect. **67** 9 p. 498.

DISCINACEA.

TREMATIDAE.

†*Schizocrania megumaensis* **sp. n.** Silurian Nova Scotia, MCLEARN Mem. Geol. Surv. Canada **137** 1924 p. 48.

DISCINIDAE.

†*Orbiculoidea clarki* **sp. n.** Silurian U.S.A., PROUTY Maryland Geol. Surv. Strat. Mem. **1923** p. 414.

CRANIACEA.

CRANIIDAE.

†*Crania alsopi* **sp. n.** Devonian U.S.A., TANSEY Missouri Bureau Geol. (2) **17** 1922 p. 182.

PROTREMATA.

ORTHACEA.

BILLINGSELLIDAE.

†*Billingsella archias* p. 501, *olen* p. 502, *origen* p. 503 **spp. n.** Cambro-Ordovician Canada, *holtedahli*, ? *oppius* p. 525, **spp. n.** Cambro-Ordovician Novaya Zemlya, WALCOTT Smithsonian Misc. Collect., **67** 9.

†*Eoorthis bellicostata* p. 505, *fascigera, iophon* p. 507, *lineocosta* p. 508, *ochus, putillus* p. 509 **spp. n.**, *putillus laeviuscula* **var. n.** p. 511, *vicina* p. 512 **sp. n.** Cambrian & Cambro-Ordovician Canada & U.S.A., *sabus* **sp. n.** p. 526 Cambro-Ordovician Novaya Zemlya, WALCOTT Smithsonian Misc. Collect., **67** 9.

†*Finkelnburgia noblei* **sp. n.** Cambrian U.S.A., WALCOTT Smithsonian Misc Collect., **67** 9 p. 514.

†*Nisusia spinigera* p. 498, *burgessensis* p. 499 **spp. n.** Cambrian Canada, WALCOTT Smithsonian Misc. Collect., **67** 9.

†*Nisusia* (*Jamesella*) *oriens* **sp. n.** Cambrian Canada, WALCOTT Smithsonian Misc. Collect., **67** 9 p. 500.

†*Protorthis iones* p. 503, *porcias* p. 504, **spp. n.** Cambro-Ordovician and Ordovician Canada, WALCOTT Smithsonian Misc. Collect., **67** 9.

†*Wimanella borealis, occidens* **spp. n.** Cambrian Canada, WALCOTT Smithsonian Misc. Collect., **67** 9 p. 501.

ORTHIDAE.

†*Dalmanella conservatrix* **sp. n.** p. 52, *elegantula* mut. *primitiva* **mut. n.**, var. *submedia* **var. n.** p. 53, mut. *transversaria* **mut. n.** p. 54, *wisbyensis* var. *nana* **var. n.** p. 55, Silurian Nova Scotia, MCLEARN Mem. Geol. Surv. Canada **137** 1924.—†*D. oriskania* **sp. n.** Devonian U.S.A., STEWART Missouri Bureau Geol. (2) **17** 1922 p. 229.

†*Idiorthis* **gen. n.** type *I. matura* **sp. n.** p. 56, *avita* **sp. n.** p. 57 Silurian Nova Scotia, MCLEARN Mem. Geol. Surv. Canada **137** 1924.

RHIPIDOMELLIDAE.

†*Enteletes hemiplicatus* mut. *naiae* **mut. n.** Permian Russia, FRÉDÉRICS Rec. Geol. Com. Russ. Far East **28** 1923 p. 28.

†*Rhipidomella ellsworthi, melvillei* **spp. n.** Devonian U.S.A., TANSEY Missouri Bureau Geol. (2) **17** 1922 p. 185.

†*Schizophorella arisaigensis* **sp. n.** Silurian Nova Scotia, MCLEARN Mem. Geol. Surv. Canada **137** 1924 p. 58.

†*Schizophoria resupinata* var. *lata*, var. *rotundata* **vars. n.** Carboniferous Belgium, DEMANET Mém. Inst. Géol. Louvain **2** 1921–23 p. 122.

STROPHOMENACEA.

STROPHOMENIDAE.

†*Amphistrophia arisaigensis* **sp. n.** Silurian Nova Scotia, MCLEARN Mem. Geol. Surv. Canada **137** 1924 p. 63.

†*Brachyprion mertoni* p. 61, (?) *honeymani* p. 62 **spp. n.** Silurian Nova Scotia, MCLEARN Mem. Geol. Surv. Canada **137** 1924.

†*Orthothetes crenistria* var. *maxima* **var. n.** Carboniferous Belgium, DEMANET Mem. Inst. Géol. Univ. Louvain **2** 1921–23 p. 126.

†*Rafinesquina beechhillensis* **sp. n.** Silurian Nova Scotia, MCLEARN Mem. Geol. Surv. Canada **137** 1924 p. 60.

†*Schuchertella elegans* p. 429, *rugosa* p. 431 **spp. n.** PROUTY and SCHWARTZ Silurian U.S.A. Maryland Geol. Surv. Strat. Mem. **1923.**—†*S. tomskensis* **sp. n.** Carboniferous Siberia, YANICHEVSKY Mém. Com. Géol. Petrograd **107** 1915 p. 90.

†*Stropheodonta convexa* p. 422, *deflecta* p. 423, *acuminata* p. 424, **spp. n.**, Silurian U.S.A. PROUTY Maryland Geol. Surv. Strat. Mem. **1923.** —†*S. missouriensis* **sp. n.** Devonian U.S.A., STEWART Missouri Bureau Geol. (2) **17** 1922 p. 232.—†*S. mineolaensis* **sp. n.** Devonian U.S.A., BRANSON Missouri Bureau Geol. (2) **17** 1922 p. 81.

THECIDIIDAE.

†*Keyserlingina darvasica* **sp. n.** Ur. Carboniferous Turkestan, TSCHERNYSCHEW Mém. Com. Géol. Petrograd **104** 1914 p. 49.

PRODUCTIDAE.

†*Chonetes novascoticus* mut. *crassistriatus* **mut. n.** Silurian Nova Scotia, MCLEARN Mem. Geol. Surv. Canada **137** 1924 p. 66.

†*Paramarginifera peregrina* **sp. n.** Permian Russia, FRÉDÉRICS Rec. Geol. Com. Russ. Far East **28** 1924 p 24.

†*Productus darvasicus* p. 63, *A. B.* **spp. n.** p. 64 Ur. Carboniferous Turkestan, TSCHERNYSCHEW Mém. Com. Géol. Petrograd **104** 1914.—†*P. suprafamenniensis* **sp. n.** Devonian Poland, JAROSZ Bul. Intern. Acad. Krakow **1918** B. p. 93.—†*P. soreili* **sp. n.** p. 136, *semireticulatus* var. *minima* **var. n.** p. 144, *maretiolensis* **sp. n.** p. 145, *corrugatus* var. *contortus* **var. n.** p. 152, *saleei* **sp. n.** p. 157, *fournieri* p. 158, *plicatiliformis* p. 161, **spp. n.**, Carboniferous Belgium, DEMANET Mém. Inst. Géol. Univ. Louvain **2** 1921–23.—†*P. giganteus* Mart., **var. n.** p. 64; *corrugatus* M'Coy *forma b.* **var. n.** p. 67; *nystianus* de Kon. **var. n.** p. 70; *cracoviensis* **sp. n.** p. 78; *pustulosus* Phil. **var. n.** p. 82; *aculeatus* var. *Davidsoni* **var. n.** p. 88; Carboniferous Poland, JAROSZ Bul. Intern. Acad. Kraków **1917** B.—†*P. punctatus* Mart. *forma lata* **form. n.** p. 23, *kulikii* p. 30, *tuberculatiformis* **sp. n.** p. 35, *genuinus* var. *orientalis* p. 46, *genuinus* var. *genuinus* **vars. n.** p. 46 *ufensis* **sp. n.** p. 51, *aagardi* Toula var. *r*, var. *knyrkoi* **vars. n.** p. 55, Carboniferous Russia, FRÉDÉRICS Mém. Com. Géol. Petrograd **103** 1915.—†*P. humerosus* var. *lata* **var. n.** p. 39, *ferganensis* p. 41, *attenuatus* p. 55, *crassomarginalis* p. 56 **spp. n.** Lower Carboniferous Russia, YANISHEVSKY Mém. Com. Géol. Petrograd **162** 1918.—†*P. ussuricus* **nom. n.** for *Strophomena analoga* Diener 1899 non Phillips. Carboniferous Siberia, FRÉDÉRICS Rec. Geol. Com. Russ. Far East **28** 1923 p. 8.

†*Productus* (*Avonia* ?) *weberi* p. 53, *multituberculatus* p. 54 **spp. n.** Lower Carboniferous Russia, YANISHEVSKY Mém. Com. Géol. Petrograd **162** 1918.

†*Productus* (*Productella*) **sp. n.** Devonian Poland, JAROSZ Bul. Intern. Acad. Krakow. **1918** B p. 96.

†*Tschernyschewiella* **gen. n.** Permian Russia, FRÉDÉRICS Rec. Geol. Com. Russ. Far East **28** 1923 p. 20.

RICHTHOFENIIDAE.

†Richthofeninae, subfam. n. of *Strophomenacea* Permian, STOYANOW Mém. Com. Géol. **111** 1915 p. 74.

†*Tegulifera transkaukasika* sp. n. Permian Armenia, STOYANOW Mém. Com. Géol. **111** 1915 p. 90.

PENTAMERACEA.

SYNTROPHIIDAE.

†*Huenella hera, icetas* p. 520, *juba, simon* p. 521, ? *weedi* spp. n. Cambrian and Cambro-Ordovician Canada ; *triplicata* p. 526 sp. n. Cambro-Ordovician Novaya Zemlya, WALCOTT Smithsonian Misc. Collect. **67** 9.

†*Syntrophia isis, nisis* p. 517, *nonus* p. 518, *perilla* p. 519, spp. n. Cambrian and Cambro-Ordovician Canada, WALCOTT Smithsonian Misc. Collect. **67** 9.

PENTAMERIDAE.

†*Camarophoria pentangulata* sp. n. Carboniferous Belgium, DEMANET Mém. Inst. Géol. Univ. Louvain **2** 1921–23 p. 190.——†*C.* (?) *ferganensis* sp. n. Lower Carboniferous, Russia, YANISHEVSKY Mém. Com. Géol. Petrograd **162** 1918 p. 65.

†*Camarophoria* (*Leiorhynchus*) *crenulata* Goss. var. *minor* var. n. Devonian Poland, JAROSZ Bul. Intern. Acad. Krakow **1918** B p. 106.

†*Conchidium cumberlandicum* sp. n. Silurian U.S.A., PROUTY Maryland Geol. Surv. Strat. Mem. **1923** p. 433.

†*Gypidula mineolaensis* sp. n. Devonian Missouri, BRANSON Missouri Bureau Geol. (2) **17** 1922 p. 90.

†*Pentamerella missouriensis, fultonensis* spp. n. Devonian U.S.A., BRANSON Missouri Bureau Geol. (2) **17** 1922 p. 88.

TELOTREMATA.

RHYNCHONELLACEA.

RHYNCHONELLIDAE.

†*Camarotoechia bimesiornata* sp. n., *nucula* var. *planorugosa* var. n. p. 69 mut. *moydartensis* mut. n., *llandoveriana* var. *rossonia* var. n. p. 70, *marklandensis, glomerosa, squamifera* p. 71 spp. n. Silurian Nova Scotia, MCLEARN Mem. Geol. Surv. Canda **137** 1924.—†*C. andrewsi* p. 439, sp. n. *litchfieldensis* var. *marylandica* var. n. *tonolowayensis* sp. n. Silurian U.S.A., PROUTY & SWARTZ Maryland Geol. Surv. Strat. Mem. **1923**.—†*C. welleri* sp. n. Devonian U.S.A., BRANSON & WILLIAMS Missouri Bureau Geol. (2) **17** 1922 p. 144.—†*C. gregeri* sp. n. Devonian Missouri, BRANSON Missouri Bureau Geol. (2) **17** 1922 p. 91.—†*C. nordeggi* sp. n. Devonian Canada, KINDLE Pan-Amer. Geol. **42** 1924 p. 218.

†*Eatonia plicata* sp. n. Devonian U.S.A., STEWART Missouri Bureau Geol. (2) **17** 1922 p. 238.

†*Eatonioides* gen. n. type *E. lamellornatus* sp. n. Silurian Nova Scotia, MCLEARN Amer. J. Sci. **45** 1918 p. 138.—†*E. westoni* sp. n. Silurian Nova Scotia, MCLEARN Mem. Geol. Surv. Canada **137** 1924 p. 74.

†*Halorella nimassica* sp. n. Trias Timor, KRUMBECK Paléontologie de Timor **13** 22 1924 p. 10.

†*Hypothyris gregeri* sp. n. Devonian U.S.A., BRANSON Missouri Bureau Geol. (2) **17** 1922 p. 91.

†*Leiorhynchus athabascense* p. 217, *glaber* p. 218, spp. n. Devonian Canada, KINDLE Pan-Amer. Geol. **42** 1924.

†*Pareatonia* sub. gen. n. type *Eatonia medialis* (Vanuxem) Silurian Nova Scotia, MCLEARN Amer. J. Sci. **45** 1918 p. 137.

†*Pectorhyncha* sub. gen. n. type *Atrypa obtusiplicata* Hall. Silurian Nova Scotia, MCLEARN Amer. J. Sci. **45** 1918 p. 137.—†*P. antigua* sp. n. Silurian Nova Scotia, MCLEARN Mem. Geol. Surv. Canada **137** 1924 p. 72.

†*Plagiorhyncha* gen. n. type *Rhynchonella glassii* Dav. = *Atrypa depressa* Sow. Silurian Nova Scotia, MCLEARN Amer. J. Sci. **45** 1918 p. 138.—†*P. plastica* sp. n. var. *media* var. n. Silurian Nova Scotia, MCLEARN Mem. Geol. Surv. Canada **137** 1924 p. 78.

†*Pugnoides swallovi* sp. n. Devonian U.S.A., BRANSON Missouri Bureau Geol. (2) **17** 1922 p. 92.

†*Rhynchonella subregilla* p. 1, *subangulifrons* p. 2, *cannabinaeformis* p. 3, *subrimkinensis* p. 4, *timorensis* p. 5, described (recorded as **sp. n.** nom. nud. in 1923) Trias Timor, KRUMBECK Paléontologie de Timor **13** 22 1924.—†*R. bononiensis* p. 45, *pilicensis* p. 47, **spp. n.** Portlandian Poland, LEWINSKI Mém. Soc. géol. Paris **56** 1922.

†*Rhynchonella* (*Pugnax*) *edelsteini* **sp. n.** Ur. Carboniferous Turkestan, TSCHERNYSCHEW, Mém. Com. Géol. Petrograd **104** 1914 p. 49.

†*Thomsonica* **nom. n.** for *Ætheia*, Thomson 1915, preoccupied by *Ætheius*, Hubn 1816 Lépid, COSSMANN Rev. crit. paléozool. Paris **24** 1920 p. 137.

†*Uncinulus manglandicus* p. 435, *obsolescens* p. 436, **spp. n.** Silurian U.S.A., SWARTZ Maryland Geol. Surv. Strat. Mem. **1923**.—†*U. parvus, salinensis* p. 239, *welleri* p. 240 **spp. n.** Devonian U.S.A., STEWART Missouri Bureau Geol. (2) **17** 1922.—†*U. subpyramidalis* **sp. n.** Devonian U.S.A., TANSEY Missouri Bureau Geol. (2) **17** 1922 p. 194.—†*U. arthaberi* **sp. n.** Ur. Carboniferous Turkestan, TSCHERNYSCHEW Mém. Com. Géol. Petrograd **104** 1914 p. 50.

†*Wilsonia wilsoni* mut. *stonehousensis* **mut. n.** Silurian Nova Scotia, MCLEARN Mem. Geol. Surv. Canada **137** 1924 p. 76.

TEREBRATULACEA.

TEREBRATULIDAE.

†*Dielasma julicum* Bittn. (?) var. *timorensis* described (recorded as **sp. n.** nom. nud. in 1923) Trias Timor, KRUMBECK Paléontologie de Timor **13** 22 1924 p. 31.

†*Dielasmina edelsteini* **sp. n.** Ur. Carboniferous Turkestan, TSCHERNYSCHEW Mém. Com. Géol. Petrograd **104** 1914 p. 44.

†*Hemiptychina darvasica* p. 45, *bukharica* p. 46 **spp. n.** Permo-Carboniferous Turkestan, TSCHERNYSCHEW Mém. Com. Géol. Petrograd **104** 1914.

†*Notothyris bukharica* **sp. n.** Ur. Carboniferous Turkestan, TSCHERNYSCHEW Mém. Com. Géol. Petrograd **104** 1914 p. 48.

†*Terebratula subturgidula* described (recorded as **sp. n.** nom. nud. in 1923) Trias Timor, KRUMBECK Paléontologie de Timor **13** 22 1924 p. 33.—†*T. ornatissima* **sp. n.** Portlandian Poland, LEWINSKI Mém. Soc. géol. Paris **56** 1922 p. 49.—†*T. bimixta* p. 23, *cuneata, linda* p. 24 **spp. n.** Jurassic Italy, DE GREGORIO Ann. Géol. Pal. Palermo **36** 1922.

†*Terebratula* ((?) *Waldheimia*) *timorensis* described (recorded as **sp. n.** nom. nud. in 1923) Trias Timor, KRUMBECK Paléontologie de Timor **13** 22 1924 p. 35.

†*Terebratulina minima* **sp. n.** Cretaceous Timor, BÖHM Paläont. Timor **14** 24 1924 p. 101.

TEREBRATELLIDAE.

†*Aulacothyris subsandlingensis* described (recorded as **sp. n.** nom. nud. in 1923) Trias Timor, KRUMBECK Paléontologie de Timor **13** 22 1924 p. 35.

†*Magadina clifdenensis* p. 532, *thomsoni* p. 533, **spp. n.** Tertiary New Zealand, FINLAY Trans. Proc. N. Zeal. Inst. Wellington **55** 1924.

†*Terebratalia transversa* Sow. **subsp. n.** ? Oligocene or Miocene Vancouver I., CLARK & ARNOLD Univ Cal. Pub. Geol. Berkeley **14** 1923 p. 176.

†*Terebratella* ? *sookensis* **sp. n.** Oligocene or Miocene Vancouver I., CLARK & ARNOLD Univ. Cal. Pub. Geol. Berkeley **14** 1923 p. 176.

SPIRIFERACEA.

SPIRIFERIDAE.

†Brachythyrinae **subfam. n.** for *Brachythyris, Eliva*, Upper Carboniferous Russia, FRÉDÉRICS Bul. Com. Géol. Petrograd **38** 1924 p 316.

†Dethyrinae **subfam. n.** for *Delthyris Munia, Spiriferellina, Reticulariina, Maia, Reticularia, Lytha, Spiriferella*. Upper Carboniferous Russia, FRÉDÉRICKS Bul. Com. Géol. Petrograd **38** 1924 p 298.

†*Delthyris crispa* mut. *moydartensis* **mut. n.** *rugaecosta* mut. *prima* **mut. n.** Silurian Nova Scotia, MCLEARN Mem. Geol. Surv. Canada **137** 1924 p. 82.—†*D. missouriensis* **sp. n.** Devonian U.S.A., TANSEY Missouri Bureau Geol. (2) **17** 1922 p. 199.

†*Elina* **gen. n.** type *Spirifer rectangulus* Kutorga, Upper Carboniferous Russia, FRÉDÉRICS Bul. Com. Géol. Petrograd **38** 1924 p. 321.

†*Eliva* **gen. n.** type *Spirifer lyra* Kutorga Upper Carboniferous Russia, FRÉDÉRICS Bul. Com. Géol. Petrograd **38** 1924 p. 316.

†*Elivina* **gen. n.** type *Spirifer tibetanus* Diener, Upper Carboniferous Russia, FRÉDÉRICS Bul. Com. Géol. Petrograd **38** 1924 p. 314.

†*Ella* **gen. n.** type *Martinia simensis* Tschern Upper Carboniferous Russia, FRÉDÉRICS Bul. Com. Géol. Petrograd **38** 1924 p. 321.

†*Elytha* **gen. n.** type *Delthyris fimbriatus* Conrad, Upper Carboniferous Russia, FRÉDÉRICS Bul. Com. Géol. Petrograd **38** 1924 p. 304.

†Elythinae **subfam. n.** for *Eospirifer*, *Spirifer Fusella*, *Spirelytha*, *Elytha*, *Choristites* Upper Carboniferous Russia, FRÉDÉRICS Bul. Com. Géol. Petrograd **38** 1924 p. 303.

†*Eospirifer stonehousensis* **sp. n.** Silurian Nova Scotia, MCLEARN Mem. Geol. Surv. Canada **137** 1924 p. 84.

†*Lytha* **gen. n.** type *Spiriferella* (?) *tschernyschewiana* Frédérics, Upper Carboniferous Russia, FRÉDÉRICS Bul. Com. Géol. Petrograd **38** 1924 p. 298.

†*Maia* **gen. n.** type *Spiriferina ornata* Waagen Upper Carboniferous Russia, FRÉDÉRICS Bul. Com. Géol. Petrograd **38** 1924 p. 300.

†*Martinia halli* **sp. n.** Devonian U.S.A., BRANSON Missouri Bureau Geol. (2) **17** 1922 p. 106.—†*M. linguiferoidea* **sp. n.** Permo-Carboniferous Japan, HAYASAKA Sci. Rep. Tohoku Imp. Univ. **8** 1 1924 p. 50.

†*Moumina* **gen. n.** type *Martinia incerta* Tschern. Upper Carboniferous Russia, FRÉDÉRICS Bul. Com. Géol. Petrograd **38** 1924 p. 321.

†*Munella* **gen. n.** type *Spirifer nikitini* Tschern. Upper Carboniferous Russia, FRÉDÉRICKS Bul. Com. Géol. Petrograd **38** 1924 p. 314.

†*Munella orientalis* **sp. n.** Permian Russia, FRÉDÉRICS Rec. Geol. Com. Russ. Far East **28** 1923 p. 45.

†Munellinae **subfam. n.** for *Munella Martiniopsis*, *Eoreticularia*, *Elivina* Upper Carboniferous Russia, FRÉDÉRICS Bul. Com. Géol. Petrograd **38** 1924 p. 314.

†*Munia* **gen. n.** type *M. muni* Upper Carboniferous Russia, FRÉDÉRICS Bul. Com. Géol. Petrograd **38** 1924 p. 299.

†*Reticularia bicostata* var. *marylandica* **var. n.** Silurian U.S.A., PROUTY Maryland Geol. Surv. Strat. Mem. **1923** p. 456.

†*Spirelytha* **gen. n.** type *Spirifer schei* Tschern. Upper Carboniferous Russia, FRÉDÉRICS Bul. Com. Géol. Petrograd **38** 1924 p. 304.

†*Spirifer mckenzicus* **sp. n.** Silurian U.S.A., PROUTY Maryland Geol. Surv. Strat. Mem. **1923** p. 446.—†*S. striatus* Mart. var. *maxima* **var. n.** p. 694; **sp. n.** p. 696; Carboniferous Poland, JAROSZ Bul. Intern. Akad. Krakow **1914** B. †*S. lyraeformis* **sp. n.** Ur. Carboniferous Turkestan, TSCHERNYSCHEW Mém. Com. Géol. Petrograd **104** 1914 p. 55.—†*S. sibiricus* **sp. n.** Carboniferous Siberia, YANICHEVSKY Mém. Com. Géol. Petrograd **107** 1915 p. 92.—†*S. derjawini* p. 81, *crassitestus* p. 96 **spp. n.** Lower Carboniferous Russia, YANISHEVSKY Mém. Com. Geol. Petrograd **162** 1918.—†*S. konincki* var. *latissimus* p. 169, var. *attenuiformis* p. 170, **vars. n.** Carboniferous Belgium, DEMANET Mém. Inst. Géol. Univ. Louvain **2** 1921–23.—*S. striatus* mut. *neostriatus* **mut. n.** Upper Carboniferous Russia, FRÉDÉRICS Bul. Com. Géol. Petrograd **38** 1924 p. 308.—†*S. tulcumbahensis* p. 500, *gunnenbenensis*, *woodhousei* p. 501 **spp. n.** Devonian Australia, MITCHELL Proc. Linn. Soc. N. S. Wales, Sydney **49** 1924.

†*Spirifer* (*Brachythyris*) *buckmani* **sp. n.** Lower Carboniferous Russia, YANISHEVSKY Mém. Com. Géol. Petrograd **162** 1918 p. 102.

†*Spirifer* (*Delthyris*) *vanuxemi* var. *tonolowayensis* **var. n.**, *keyserensis* **sp. n.** Silurian U.S.A., SWARTZ Maryland Geol. Surv. Strat. Mem. **1923** p. 449.

†*Spirifer* (*Martinia*) *glaber* **mut. n.** *glaber* var. *Davidsoni* **var. n.** p. 698 Carboniferous Poland, JAROSZ Bul. Intern. Akad. Kraków **1914** B.

†*Spiriferella saranae* mut. *lita* **mut. n.** Permian Russia, FRÉDÉRICS Rec. Geol. Com. Russ. Far East **28** 1923 p. 36.

†*Spiriferellina* **gen. n.** type *Terebratulites cristatus* Schloth. Upper Carboniferous Russia, FRÉDÉRICS Bul. Com. Géol. Petrograd **38** 1924 p. 299.

†*Syringothyris* **sp. n.** Devonian U.S.A., BRANSON Missouri Bureau Geol. (2) **17** 1922 p. 104.

SUESSIIDAE.

†*Cyrtella* **gen. n.** type *C. kulikiana* Frédérics Upper Carboniferous Russia, FRÉDÉRICS Bul. Com. Géol. Petrograd **38** 1924 p. 312.

†Cyrtiinae **subfam. n.** for *Cyrtia*, *Cyrtospirifer*, *Cyrtella* Upper Carboniferous Russia, FRÉDÉRICS Bul. Com. Géol. Petrograd **38** 1924 p. 312.

†*Spiriferina octoplicata* Sow. var. *concentrica* **var. n.** Carboniferous Siberia, YANICHEVSKY Mém. Com. Géol. Petrograd **107** 1915 p. 93.—†*S. laxa*, *quadricostata*, *noctua* **spp. n.** Jurassic Italy, DE GREGORIO Ann. Geol. Pal. Palermo **36** 1922 p. 22.—†*S. darvasica* **sp. n.** Ur. Carboniferous Turkestan, TSCHERNYSCHEW Mém. Com. Géol. Petrograd **104** 1914 p. 55.—†*S. sublilangensis* p. 11, sp. aff. *sublilangensi* p. 14, *bihatiensis*, *subgriesbachi* p. 15, *timorensis* p. 17, **sp. n.** aff. *shalshalensi* p. 18, described (recorded as **sp. n.** nom. nud. in 1923) Trias Timor, KRUMBECK Paléontologie de Timor **13** 22 1924.

RHYNCHOSPIRIDAE.

†*Homoeospira evax* var. *marylandica* **var. n.** Silurian U.S.A., PROUTY Maryland Geol. Surv. Mem. **1923** p. 457.

†*Rhynchospira attenuata* **sp. n.** Devonian U.S.A., STEWART Missouri Bureau Geol. (2) **17** 1922 p. 248.

MERISTELLIDAE.

†*Hindella* (?) (*Greenfieldia*) *congregata* **sp. n.** p. 459, var. *intermedia*, var. *pusilla* **vars. n.** p. 461 Silurian U.S.A., SWARTZ Maryland Geol. Surv. Strat. Mem. **1923.**

†*Meristella ampla* p. 249, *carinata*, *elliptica*, *ovalis* p. 250 **spp. n.** Devonian Missouri, STEWART Missouri Bureau Geol. (2) **17** 1922.

†*Meristina globosa* **spp. n.** Silurian U.S.A., PROUTY Maryland Geol. Surv. Strat. Mem. **1923** p. 463.

†*Whitfieldella marylandica* p. 464, *subovata* p. 465 **spp. n.** Silurian U.S.A., PROUTY Maryland Geol. Surv. Strat. Mem. **1923.**—†*W.* (?) *crassa* var. *beechhillensis* **var. n.** (?) *northumberlandensis* **sp. n.** Silurian Nova Scotia, MCLEARN Mem. Geol. Surv. Canada **137** 1924 p. 87.

COELOSPIRIDAE.

†*Coelospira sulcata* **sp. n.** Silurian U.S.A., PROUTY Maryland Geol. Surv. Mem. **1923** p. 466.

ATHYRIDAE.

†*Athyris bulgaensis* **sp. n.** Devonian Australia, MITCHELL Proc. Linn. Soc. N. S. Wales Sydney **49** 1924 p. 502.

†*Koninckina subexpansa* described (recorded as **sp. n.** nom. nud. in 1923) Trias Timor, KRUMBECK Paléontologie de Timor **13** 22 1924 p. 29.

†*Misolia aspera* described (recorded as **sp. n.** nom. nud. in 1923) Trias Timor, KRUMBECK Paléontologie de Timor **13** 22 1924 p. 27.

†*Spirigera subindistincta* **sp. n.** Trias Timor, KRUMBECK Paléontologie de Timor **13** 22 1924 p. 21.

VII (b) BRYOZOA

CONTENTS.

PAGE

I. Titles 13

II. Subject Index 16

III. Systematic Index 16

I.—TITLES.

1.—Abricossoff, G. G. [Абрикосов, Г. Г.] To the knowledge of the Fauna of the Bryozoa of the Lake Baikal. К позна нию фауны мшанок озера Байкала. Russ. Hydrobiol. Zeits. Saratov **3** 1924 pp. 260–266 5 text figs. [Summary in English.]

2.—Androussov, N. [Андрусовъ, Н.] Нубекуляріевые желваки средняго сармата Мангышлака и крыма. Trav. Mus. Géol. et Min. Emp. Pierre le Grand Petrograd **3** 1923 pp. 1–21 2 text figs. 9 pls.

3.—Annandale, N. The Macroscopic Fauna of Lake Biwa. Annot. Zool. Jap. Tokyo **10** 1922 pp. 136, 142.

4.—Annandale, N. The Marine Element in the Fauna of the Ganges. Bijdr. Dierk. Amsterdam **22** 1922 p. 150.

5.—Barroso. G. Nota sobre briozoos fósiles del Maestrichtiense en los alrededores del Faro (Santander). Asoc. Esp. Progr. Cienc. Salamanca. **6** 1924 pp. 53–56 2 figs.

6.—Barroso. M. G. Notas sobre briozoos de Tánger. Bol. Soc. Esp. Hist. Nat. Madrid **24** 6 1924 pp. 291–298 3 text figs.

7.—Bassler, R. S. Bryozoa in "Systematic Paleontology." Maryland Geological Survey Strat. Mem. Silurian Baltimore **1923** pp. 405–412 pls. xiii–xiv.

8.—Beauchamp, P. de. Etudes de Bionomie intercotidiale. Les Iles de Ré et d'Yeu. Arch. Zool. Paris **61** 1923 pp. 455–520.

9.—Böhm, J. Uber eine senone Fauna von Misol. Paläont. Timor Stuttgart **14** 24 1924 p. 101.

10.—Boswell, P. G. H. The Faunal Relations of the Crag Deposits of the Bentley district, Suffolk. Proc. Geol. Ass. London **35** 1924 pp. 212–220.

11.—Branson, E. B. The Devonian of Missouri. Missouri Bureau Geol. Rolla (2) **17** 1922 pp. 68–71 3 pls.

12.—Branson, E. B. and **Williams,** J. S. Fauna of the Middle Devonian of southeastern Missouri. Missouri Bureau Geol. Rolla (2) **17** 1922 p. 132.

13.—Buchner, P. Studien über den Polymorphismus der Bryozoen I. Anatomische und systematisch Untersuchungen an japanischen *Reteporiden*. Zool. Jahrb. Jena **48** 1924 pp. 155–216 3 pls. 21 text figs.

14.—Canu, F. Bryozoaires **in Dollfus,** R. P. Contribution à la faune des Invertébrés du banc de Rockall. Bul. Inst. Océan. Monaco **438** 1924 pp. 13–17.

15.—Chapman, F. The Fossiliferous Beds of Violet Creek, near Hamilton. Vict. Nat. Melbourne **40** 1923 pp. 148–151.

Chumley, J. *vide* Murray, J.

16.—Cossmann, M. Rectifications de nomenclature. Rev. crit. paléozool. Paris **24** 1920 2 pp. 81–83.

17.—Couffon, O. Le Bajocien et le Bathonien en Maine-et-Loire. Bul. soc. d'Et. sci. d'Angers **53** 1914 pp. 69–86.

18.—Demanet, F. Le Waulsortien de Sosoye. Mem. Inst. Géol. Univ. Louvain **2** 1921–23 pp. 39–284 pl. xiv.

19.—Derjugin, K. Das Barents-Meer längs dem Kola-Meridian. Intern. Rev. Hydrobiol. Leipzig **12** 1924 p. 159.

20.—Duvergier, J. Deuxième note sur les Bryozoaires du Néogène de l'Aquitaine. Act. Soc. Linn. Bordeaux **75** 1923 pp. 145–190 6 pls.

21.—Eyerdem, W. Marine Shells of Drier Bay, Knight Island, Prince William Sound, Alaska. Nautilus, Boston, Mass. **38** 1924 pp. 22–28.

22.—Frédériks, G. [Фредериксъ, Г.] La Faune paléozoique supérieure des environs de la ville de Krasnooufimsk. Фауна верхнепалеозойской толщи окрестностей города красноуфимска пермской губ. Mém. Com. Géol. Petrograd **109** 1915 pp. 1–117 10 pls.

23.—Frédériks, G. [Фредериксъ, Г.] Etudes paléontologiques. I. Essai de la classification de la fam. *Fenestellidae* King. Палеонтологическіе этюды. I. Опытъ классификаціи сем. *Fenestellidae* King. Bul. Com. Géol. Petrograd **37** 5 & 6 1920 pp. 545–560.

24.—Fritzsche, C. H. Neue Kreidefaunen aus Südamerika (Chile, Bolivia, Peru, Columbia). N. Jahrb. Min. Stuttgart B-B **50** 1924 pp. 313–334.

25.—Garwood, E. J. and **Goodyear,** E. The Lower Carboniferous Succession in the Settle District and along the Line of the Craven Faults. Q. J. Geol. Soc. London **80** 1924 pp. 184–273 pls. x–xxi.

26.—Gaster, C. T. A. The Chalk of the Worthing District, Sussex. Proc. Geol. Ass. London **35** 1924 pp. 89–110.

Goodyear, E. *vide* Garwood, E. J.

27.—Hayasaka, I. On the Fauna of the Anthracolithic Limestone of Ômi-Mura in the Western Part of Echigo. Sci. Rep. Tohoku Imp. Univ. Sendai **8** 1 1924 pp. 1–83.

28.—Livingstone, A. A. Studies on Australian Bryozoa I. Rec. Austral. Mus. Sydney **14** 1924 pp. 189–212 4 pls. 1 text fig.

29.—Marcus, E. Zur vergleichenden Embryologie der Bryozoen. Mitt. zool. Mus. Berlin **11** 1 1924 pp. 157–166.

30.—Meek, A. Plankton Investigations. III. Marine Plankton (5) Bryozoa. Rep. Dove Mar. Lab. Cullercoats N.S. **12** 1923 p. 134.

31.—Meek, A. Plankton Investigations (5) Bryozoa. Rep. Dove Mar. Lab. Cullercoats N.S. **13** 1924 p. 103.

32.—Mokrinskij, V. V. [Мокринскій, В. В.] Les Bryozoaires tertiares de Mangyšlak. Третичные Bryozoa Мангышлака. Bul. Acad. Sci. Russ. Petrograd **9** 1915 p. 272.

33.—Mokrinskij, W. W. [Мокринскій, В. В.] Третичныя Bryozoa Мангышлака. Les tertiares Bryozoa de Mangyšlak. Trav. Mus. Géol. et Min. Emp. P. le G. Petrograd **2** 1916 pp. 1–79 2 pls.

34.—Mortensen, T. The Danish Expedition to the Kei Islands 1922. Videns. Medd. nat. For. Kjöbenhavn **76** 1923 pp. 56–99.

35.—Murray, J. and **Chumley,** J. The Deep-sea Deposits of the Atlantic Ocean. Trans. R. Soc. Edinburgh **54** 1924 p. 248.

36.—Nordgård, O. Report of the Scientific Results of the Norwegian Expedition to Novaya Zemlya 1921. No. 17. Bryozoa. Christiania **1923** pp. 1–19 4 text figs.

37.—O'Donoghue, C. H. and **O'Donoghue,** E. A Preliminary list of Polyzoa (Bryozoa) from the Vancouver Island region. Contr. Canadian Biol. Toronto N.S. **1** 1923 pp. 143–201 4 pls.

O'Donoghue, E. *vide* O'Donoghue, C. H.

38.—Osburn, R. C. Report of the Canadian Arctic Expedition 1913–18. **8** Part D. Bryozoa. Southern Party 1913–16. Ottawa 1923 pp. 1D–13D.

39.—Parker, G. H. The growth of Marine Animals on Submerged Metals. Biol. Bull. Wood's Hole, Mass., **47** 1924 pp. 127–134 pls. i–v.

40.—Pateff, P. [Патевъ, П.] Mitteilung über die Süsswasser-Bryozoen Bulgariens. Съобщение върху сладководнитѣ Bryozoa въ България. Trav. Soc. Bulg. Sci. Nat. Sophia **11** 1924 pp. 119–121 **3** text figs.

41.—Savage. T. E. Richmond Rocks of Iowa and Illinois. Amer. J. Sci. New Haven, Conn. **8** 1924 pp. 411–427.

42.—Scourfield, D. J. High-power Work on the larger microscopic Organisms. J. Quek. Microsc. Club London ser. 2 **15** 1924 pp. 65–80 1 pl.

43.—Stadler, H. Einiges über die Tierwelt Unterfrankens. II. Beitrag. Arch. Natg. Berlin **90** Abt. A. 1 1924 pp. 169–201.

44.—Stechow, E. Uber Hydroiden der deutschen Tiefsee-Expedition, nebst Bemerkungen über einige andere Formen. Zool. Anz. Leipzig **56** 1923 pp. 102–103.

45.—Stewart, G. A. The Fauna of the Little Saline Limestone in Ste. Genevieve County. Missouri Bureau Geol. Rolla. (2) **17** 1922 pp. 223–228 pls. lviii–lx.

46.—Tansey, V. O. The Fauna and the Correlation of the Bailey Limestone in the Little Saline Creek area of Ste. Genevieve County, Missouri. Missouri Bureau Geol. Rolla. (2) **17** 1922 pp. 181–182 pl. xliv.

47.—Thomas, A. O. Some Fossils from an Outcrop in Des Moines. Proc. Iowa Acad. Sci. Des Moines **30** 1923 pp. 471–479 2 pls.

48.—Thornley, L. R. Polyzoa. Sci. Rep. Series C. Zoology and Botany **6** 6. Australian Antarctic Expedition 1911–14. Sydney 1924 pp. 1–23 5 text figs.

49.—Vallentin, R. Bryozoa in **Boyson,** V. F. The Falkland Islands. Oxford 1924 pp. 372–376.

50.—Voigt, E. Über eine ctenostome Bryozoe aus dem Granulatensenon von Gr. Bülten bei Peine. Palaeont. Zs., Berlin **6** 1924 pp. 1–2 1 text fig.

51.—Voigt, E. Uber eine Bryozoen aus Daniengeschieben Anhalts. Palaeont. Zs., Berlin **6** 1924 pp. 3–13 1 pl. 1 text fig.

52.—Voigt, E. Beiträge zur Kenntnis der Bryozoenfauna der subherzynen Kreidemulde. Palaeont. Zs. Berlin **6** 1924 pp. 93–173 6 pls. 12 text figs.

Williams, J. S. *vide* Branson, E. B.

53.–Yanichevsky, M. [Янишевскаго, М.] Les Schistes argileux près de la ville de Tomsk. Глинистые сланцы, выступающіе околог. томска. Mém. Com. Géol. Petrograd **107** 1915 pp. 1–96 pl. i. [Resumé in French.]

54.—Zirpolo, G. Sulla genesi delle colonie primaverili del *Zoobotryon pellucidum* Ehrbg. Boll. soc. nat. Napoli. **35** 1924 pp. 113–128 6 text figs.

55.—Zirpolo, G. Sull'azione delle basse temperature sullo sviluppo del *Zoobotryon pellucidum* Ehrbg. Boll. soc. nat. Napoli **35** 1924 pp. 263–264.

56.—Zirpolo, G. Azione del freddo sullo sviluppo e sulla rigenerazione dei rami coloniali del *Zoobotryon verticillatum* (Delle Chiaje). Rendic. Convegno Genova **1923** pp. 18–20. [In Monitore Zool. Ital. Firenze **35** No. 11, 1924.]

57.—Zirpolo, G. Nuovo caso di simbiosi fra Zooxantelle e *Bicillaria ciliata*, briozoo del Golfo di Napoli. Rendic. Convegno Genova **1923** pp. 20–21. [In Monitore Zool. Ital. Firenze **35**, 1924.]

58.—Zirpolo, G. Le restituzioni dei rami coloniali del *Zoobotryon pellucidum* Ehrbg. Pubbl. Staz. Zool. Napoli **5** 1924 pp. 97–134 2 pls. 11 text figs.

II.—SUBJECT INDEX.

STRUCTURE.

Fenestella, FRÉDÉRIKS, **23**; *Retepora*, BUCHNER, **13**; *Zoobotryon*, ZIRPOLO, **56, 57**; General, LIVINGSTONE, **28**; Under microscope, SCOURFIELD, **42**.

PHYSIOLOGY.

ZIRPOLO, **55**.

ETHOLOGY.

Regeneration, ZIRPOLO, **54, 58**.

Symbiosis, ZIRPOLO, **57**.

Development, ZIRPOLO, **56**.

Growth on metals, PARKER, **39**.

Polymorphism, BUCHNER, **13**.

Embryology, MARCUS, **29**.

DISTRIBUTION.

(*a*) RECENT.

England, MEEK, **30, 31**; Lower Franconia, STADLER, **43**; France, BEAUCHAMP, **8**; G. of Naples, ZIRPOLO, **57**; Rockall, CANU, **14**; Bulgaria, PATEFF, **40**; Novaya Zemlya, NORDGÅRD, **36**; Barents Sea, DERJUGIN, **19**; Arctic Regions & Alaska, OSBURN, **38**, and EYERDEM, **21**; Antarctic Regions, THORNELY, **48**; Atlantic Ocean, MURRAY & CHUMLEY, **35**; Pacific Ocean, BUCHNER, **13**; L. Baikal, Siberia, ABRICOSSOFF, **1**; Japan, ANNANDALE, **3**; R. Ganges, ANNANDALE **4**; Malay Archipelago, MORTENSEN, **34**; Tangiers, BARROSO, **6**; R. Congo, STECHOW, **44**; U.S.A., PARKER, **39**; Vancouver, **1**; O'DONOGHUE & O'DONOGHUE, **37**; Falkland I., VALLENTIN, **49**; Australia, LIVINGSTONE, **28**.

(*b*) FOSSIL.

Palaeozoic.—Russia, FRÉDÉRIKS, **22**.

Ordovician.—U.S.A., SAVAGE, **41**.

Silurian.—U.S.A., BASSLER, **7**.

Devonian.—U.S.A., BRANSON, **11**; BRANSON & WILLIAMS, **12**; STEWART, **45**; TANSEY, **46**.

Carboniferous.—England, GARWOOD & GOODYEAR, **25**; Belgium, DEMANET, **18**.

Permo-Carboniferous.—Japan, HAYASAKA, **27**; U.S.A., THOMAS, **47**.

Jurassic.—France, COUFFON, **17**.

Cretaceous.—England, GASTER, **26**; Denmark & Germany, VOIGT, **51**; Germany, VOIGT, **50, 52**; Misol I., Malay Archipelago, BÖHM, **9**; S. America, FRITZSCHE, **24**.

Tertiary.—France, DUVERGIER, **20**; Transcaspian Province, Mangyslak Peninsula, MOKRINSKIJ, **32, 33**; Australia, CHAPMAN, **15**.

Miocene.—France, DUVERGIER, **20**.

Pliocene.—England, BOSWELL, **10**.

III.—SYSTEMATIC INDEX.

Note.—Classification according to R. S. Bassler in "Zittel-Eastman Textbook of Palaeontology." 2nd ed., 1913.

ECTOPROCTA.

GYMNOLAEMATA.

CTENOSTOMATA.

Alcyonidium spinifera **sp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N.S. **1** p. 50.

Cylindroecium repens **sp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N.S. **1** p. 51.

†*Rhopalonaria tenerrima* **sp. n.** Silurian U.S.A., BASSLER Maryland Geol. Surv. Strat. Mem. Silurian **1923** p. 405.

Triticella tegeticula **sp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N.S. **1** p. 51.

†*Vinella cretacea* **sp. n.** Cretaceous Germany, VOIGT Palaeont. Zs. Berlin **6** 1924 p. 2.

CYCLOSTOMATA.

†*Ceriopora gutta* **sp. n.** Cretaceous Denmark, VOIGT Palaeont. Zs. Berlin **6** 1924 p. 6.

†*Cyclotrypa magna-monticulata* **sp. n.** Devonian U.S.A., BRANSON Missouri Bureau Geol. (2) **17** 1922 p. 68.

†*Desmepora subhercynica* **sp. n.** Cretaceous Germany, VOIGT Palaeont. Zs. Berlin **6** 1924 p. 150.

†*Diastopora cava* **sp. n.** Cretaceous Germany, VOIGT Palaeont. Zs. Berlin **6** 1924 p. 115.

†*Diplosolen germanicus* **sp. n.** Cretaceous Germany, VOIGT Palaeont. Zs. Berlin **6** 1924 p. 139.

†*Discocytis patelliformis* **sp. n.** Cretaceous Germany, VOIGT Palaeont. Zs. Berlin **6** 1924 p. 151.

†*Elea nodulifera* **sp. n.** Cretaceous Germany, VOIGT Palaeont. Zs. Berlin **6** 1924 p. 165.

†*Entalophora* (?) *bifrons* **sp. n.** Cretaceous Germany, VOIGT Palaeont. Zs. Berlin **6** 1924 p. 6.—*E. vancouverensis* **sp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N.S. **1** p. 13.

†*Fasciculipora hustedti*, p. 122, *constricta* p. 123, *granulosa* p. 124 **spp. n.** Cretaceous Germany, VOIGT Palaeont. Zs. Berlin **6** 1924.

†*Filicea cincta* **sp. n.** Cretaceous Germany, VOIGT Palaeont. Zs. Berlin **6** 1924 p. 170.

†*Filisparsa proboscidea, microstoma* **spp. n.** Cretaceous Denmark, VOIGT Palaeont. Zs. Berlin **6** 1924 p. 5.—†*F. celebrata* **sp. n.** Tertiary Transcaspian Province, MOKRINSKIJ Trav. Mus. Géol. et Min. Petrograd **2** 1916 p. 72.

†*Fistulipora minima* **sp. n.** Permo-Carboniferous Japan, HAYASAKA Sci. Rep. Tôhoku Imp. Univ. **8** 1 1924 p. 55.—†*F. acutula, variolata* **spp. n.** Devonian U.S.A., STEWART Missouri Bureau Geol. (2) **17** 1922 p. 223.

†*Fistuliporella tenuilamellata* **sp. n.** Silurian U.S.A., BASSLER Maryland Geol. Surv. Strat. Mem. **1923** p. 406.

Heteropora magna **sp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N.S. **1** p. 14.

†*Hornera truncatuloides* **sp. n.** Tertiary Transcaspian Province, MOKRINSKIJ Trav. Mus. Géol. et Min. Petrograd **2** 1916 p. 73.

†*Idmonea translucens* **sp. n.** Cretaceous Germany, VOIGT Palaeont. Zs. Berlin **6** 1924 p. 141.—†*I. diligens* **sp. n.** Tertiary Transcaspian province, MOKRINSKIJ Trav. Mus. Géol. et Min. Petrograd **2** 1916 p. 74.—*I. palmata* **sp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N. S. **1** p. 12.

†*Lichenopora bueltenensis* p. 160, *butzmanni* p. 162 **spp. n.** Cretaceous Germany, VOIGT Palaeont. Zs. Berlin **6** 1924.—*L. fava* **sp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N.S. **1** p. 16.

†*Proboscina celsa* **sp. n.** Cretaceous Denmark, VOIGT Palaeont. Zs. Berlin **6** 1924 p. 4.

†*Reptoclausa wolffi* **sp. n.** Cretaceous Germany, VOIGT Palaeont. Zs. Berlin **6** 1924 p. 146.

†*Reptotubigera rugica* **sp. n.** Cretaceous Rugen, VOIGT Palaeont. Zs. Berlin **6** 1924 p. 5.

†*Semimultelea polytaxis* p. 166, *canui* p. 167 **spp. n.** Cretaceous Germany, VOIGT Palaeont. Zs. Berlin **6** 1924.

†*Spiropora ingens* **sp. n.** Cretaceous Germany, VOIGT Palaeont. Zs. Berlin **6** 1924 p. 137.

†*Tervia reticulum* **sp. n.** Cretaceous Germany, VOIGT Palaeont. Zs. Berlin **6** 1924 p. 147.

†*Trochiliopora truncata* **sp. n.** Cretaceous Germany, VOIGT Palaeont. Zs. Berlin **6** 1924 p. 164.

Tubulipora striata, labiata p. 9, *intermedia* p. 10 **spp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N.S. **1**.

TREPOSTOMATA.

†*Cyphotrypa expanda* **sp. n.** Silurian U.S.A., BASSLER Maryland Geol. Surv. Strat. Mem. **1923** p. 407.

†*Heterotrypa undata* **sp. n.** Devonian U.S.A., STEWART Missouri Bureau Geol. (2) **17** 1922 p. 224.

†*Leptotrypa silurica* **sp. n.** Silurian U.S.A., BASSLER Maryland Geol. Surv. Strat. Mem. **1923** p. 408.

†*Lioclema tenuirama* **sp. n.** Silurian U.S.A., BASSLER Maryland Geol. Surv. Strat. Mem. **1923** p. 408.

†*Rhombotrypa ramulosa* **sp. n.** Silurian U.S.A., BASSLER Maryland Geol. Surv. Strat. Mem. **1923** p. 409.

CRYPTOSTOMATA.

†*Coscinium missouriensis* **sp. n.** Devonian U.S.A., BRANSON Missouri Bureau Geol. (2) **17** 1922 p. 71.

†*Cystodictya mineolaensis* **sp. n.** Devonian U.S.A., BRANSON Missouri Bureau Geol. (2) **17** 1922 p. 71.

†*Fenestella missouriensis* **sp. n.** Devonian U.S.A., BRANSON Missouri Bureau Geol. (2) **17** 1922 p. 69.

†*Fenestepora* **subgen. n.** type *F. jabiensis* Upper Carboniferous Russia, FRÉDÉRIKS Mém. Com. Géol. Petrograd **109** 1915 p. 47.

†*Hemitrypa mineolaensis* **sp. n.** Devonian U.S.A., BRANSON Missouri Bureau Geol. (2) **17** 1922 p. 70.

†*Loculiporella* **gen. n.** Type *Fenestella laevis* Eichwald, FRÉDÉRIKS Bul. Com. Géol. Pétrograd **37** 5 & 6 1920 p. 553.

†*Orthopora tonolowayensis* **sp. n.** Silurian U.S.A., BASSLER Maryland Geol. Surv. Strat. Mem. **1923** p. 410.

†*Polypora media, valida* **spp. n.** Devonian U.S.A., STEWART Missouri Bureau Geol. (2) **17** 1922 p.227.—†*P. sibirica* **sp. n.** Carboniferous Siberia, YANICHEVSKY Mém. Com. Géol. Petrograd **107** 1915 p. 90.

†*Polyporina* **nom. n.** for *Polypora* Simpson, 1894 (non M'Coy) Type *Polypora orbicribrata* Keyserl., FRÉDÉRIKS Bul. Com. Géol. Pétrograd **37** 5 & 6 1920 p. 553.

†*Rhombopora missouriensis* **sp. n.** Devonian U.S.A., BRANSON Missouri Bureau Geol. (2) **17** 1922 p. 70.

†*Unitrypa subcircularis* **sp. n.** Devonian U.S.A., STEWART Missouri Bureau Geol. (2) **17** 1922 p. 226.

CHEILOSTOMATA.

Arachnopusia ajax **sp. n.** Recent Australia, LIVINGSTONE Rec. Austral. Mus. Sydney **14** 1924 p. 202.

Aspidostoma obliquum **sp. n.** Recent Antartic, THORNELEY Australian Antarctic Exped. 1911–14 Sci. Rep. **6** 6 1924 p. 16.

†*Bathosella globulosa* **sp. n.** Miocene France, DUVERGIER Act. soc. Linn. Bordeaux **75** 1923 p. 178.

Beania columbiana **sp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N. S. **1** p. 22.

Bicellaria brevispina **sp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N. S. **1** p. 19.

†*Cauloramphus salomacensis* **sp. n** Miocene France, DUVERGIER Act. Soc. Linn. Bordeaux **75** 1923 p. 158.

Cellaria membranacea **sp. n.** Recent Antarctic, THORNELEY Australian Antarctic Exped. 1911–14 Sci. Rep. **6** 6 1924 p. 9.

†*Cellepora fimbriata* **sp. n.** Tertiary Trans-Caspian Province, MOKRINSKIJ Trav. Mus. Géol. et Min. Petrograd **2** 1916 p. 70.—†*C. barrerei* **sp. n.** Miocene France, DUVERGIER Act. soc. Linn. Bordeaux **75** 1923 p. 188.—*C. setosa* **sp. n.** Recent Antarctic, THORNELEY Australian Antarctic Exped. 1911–14 Sci. Rep. **6** 6 1924 p. 17.—*C. armiger* **sp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N. S. **1** p. 48.

†*Cupularia peyroti* **sp. n.** Miocene France, DUVERGIER Act. soc. Linn. Bordeaux **75** 1923 p. 159.

†*Distansescharella glabra* **sp. n.** Cretaceous Germany, VOIGT Palaeont. Zs. Berlin **6** 1924 p. 12.

†*Eschara squalida* **sp. n.** Tertiary Transcaspian Province, MOKRINSKIJ Trav. Mus. Géol. et Min. Petrograd **2** 1916 p. 71.

†*Figularia carinata* **sp. n.** Miocene France, DUVERGIER Act. soc. Linn. Bordeaux **75** 1923 p. 164.

†*Floridina variabilis* **sp. n.** Cretaceous Denmark, VOIGT Palaeont. Zs. Berlin **6** 1924 p. 8.

Flustra simplex **sp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N. S. **1** p. 24.

†*Flustrina sexagona* **sp. n.** Tertiary Transcaspian Province, MOKRINSKIJ Trav. Mus. Géol. et Min. Petrograd **2** 1916 p. 72.

†*Hippadenella variabilis* **sp. n.** p. 176, *parvirostrata* mut. *coangustata* **mut. n.** p. 178 Miocene France, DUVERGIER Act. soc. Linn. Bordeaux **75** 1923.

†*Hippodiplosia formosa* **sp. n.** Miocene France, DUVERGIER Act. soc. Linn. Bordeaux **75** 1923 p. 173.

Hippopodinella **gen. n.** type *Lepralia adpressa* Busk, 1854. Recent Tangiers, BARROSÕ Bol. Soc. Esp. Hist. Nat. Madrid **24** 1924 p. 295.

†*Holoporella elatior* p. 188, *serrulata* p. 189, **spp. n.** Miocene France, DUVERGIER Act. soc. Linn. Bordeaux **75** 1923.

†*Homalostega tenera* p. 8, *parvicella*, *erratica* p. 9 **spp. n.** Cretaceous Germany, Denmark, VOIGT Palaeont. Zs. Berlin **6** 1924.

Lagenipora erecta **sp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N. S. **1** p. 33.

†*Lepralia cerea* **sp. n.** Tertiary Transcaspian Province, MOKRINSKIJ Trav. Mus. Géol. et Min. Petrograd **2** 1916 p. 75.—*L. regularis* **sp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N. S. 1 p. 40.

†*Levinseniula* **nom. n.** for *Porella*, Levinsen 1916, homonym of a genus of mollusca Roemer 1863, and of protozoa Cleve, 1899, COSSMANN Rev. crit. paléozool. Paris **1920** p. 83.*

†*Mastigophora labiosa* p. 184, *salomacensis* p. 185 **spp. n.**, Miocene France, DUVERGIER Act. soc. Linn. Bordeaux **75** 1923.

†*Membranipora marssoniana* p. 6, *diluvii* p. 7, *huckeana* p. 8 **spp. n.** Cretaceous Denmark, VOIGT Palaeont. Zs. Berlin **6** 1924.—†*M. impolita* **sp. n.** Tertiary Transcaspian Province, MOKRINSKIJ Trav. Mus. Géol. et Min. Petrograd **2** 1916 p. 76.—*M. elongata* **sp. n.** Recent Antarctic, THORNELY Australian Antarctic Exped. 1911–14 Sci. Rep. **6** 6 1924 p. 8.—*M. alicornis* p. 26, *cassidata* p. 27, *aquilirostris*, *alba* p. 28, *inconspicua*, *varians* p. 29, **spp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N. S. **1**.

Membraniporella corbicula **sp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N. S. **1** p. 30.

†*Membraniporina rozieri* p. 155, *dutertrei* p. 156, **spp. n.** Miocene France, DUVERGIER Act. soc. Linn. Bordeaux **75** 1923.

†*Meniscopora* (?) *patens* **sp. n.** Miocene France, DUVERGIER Act. soc. Linn. Bordeaux **75** 1923 p. 183.

†*Metrarabdotos girondicus* **sp. n.** Miocene France, DUVERGIER Act. soc. Linn. Bordeaux **75** 1923 p. 180.

Microporella setiformis **sp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N. S. **1** p. 32.

Mucronella coronata **sp. n.** Recent Antarctic, THORNELEY Australian Antarctic Exped. 1911–14 Sci. Rep. **6** 6 1924 p. 15.

Myriozoum tenue **sp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N. S. 1 p. 39.

Normanellina **nom. n.** for *Conopeum* Norman (1903) on ground that it is identical with *Conopeum* Gray (1848), COSSMAN Rev. crit. paléozool. Paris **24** 1920 p. 83. *

---

* f. n. Genus invalid. The name *Porella* was introduced by Gray in 1848 and antedates both the uses of *Porella* quoted by COSSMANN. [Note by Sir S. F. HARMER.]

* f. n. Genus invalid. The genotypes both of *Conopeum* Gray and of *Conopeum* Norman are the same, namely, that species to which belong the specimens in the British Museum referred by Gray to *Millepora reticulum*, Esper. [W. D. Lang.]

†*Ogivalina* ? *denticulata* **sp. n.** Miocene France, DUVERGIER Act. soc. Linn. Bordeaux **75** 1923 p. 157.

Palmicellaria dofleini **sp. n.** Recent Pacific, BUCHNER Zool. Jahrb. Jena **48** 1924 p. 210.

Parmularia macneilli p. 194, *integer* p. 195, **spp. n.** Recent Australia, LIVINGSTONE Rec. Austral. Mus. Sydney **14** 1924.

Phylactella pacifica **sp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N. S. **1** p. 44.

†*Pliophloea vincularoides* **sp. n.** Cretaceous Germany, VOIGT Palaeont. Zs. Berlin **6** 1924 p. 11.

Porella columbiana, bispina p. 41, *cribriformis* p. 42 **spp. n.** Recent Vancouver I., O'DONOGHUE & DONOGHUE Contr. Canadian Biol. N.S. **1**.

†*Poricella* **sp. n.** aff. *P. elongata* Canu. Tertiary Transcaspian Province, MOKRINSKIJ Trav. Mus. Géol. et Min. Petrograd **2** 1916 p. 79.

†*Porina cylindrica* **sp. n.** Cretaceous Germany, VOIGT Palaeont. Zs. Berlin **6** 1924 p. 10.

Retepora pacifica var. *disposita* **var. n.** p. 187, *terebrata* p. 191, *obtecta* **spp. n.** p. 196, *axillaris* Ortm. var. *rustica* **var. n.** var. *deliciosa* **vars. n.** p. 199, var. *okada* **var. n.**, *antennula* p. 200, *gibberosa* **spp. n.** p. 201, *bimunita* var. *trimunita* p. 204, var. *sparsimunita* **vars. n.** p. 206. Recent Pacific, BUCHNER Zool. Jahrb. Jena **48** 1924.

Rhamphostomella curvirostrata, p. 44, *porosa* p. 45 **spp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N. S. **1**.

†*Schizobrachiella sanguinea* var. *parvula* **var. n.** Miocene France, DUVERGIER Act. soc. Linn. Bordeaux **75** 1923 p. 168.

†*Schizopodrella unicornis* var. *laevimarginata* **var. n.**, *perincisa* **sp. n.** p. 167 Miocene France, DUVERGIER Act. soc. Linn. Bordeaux **75** 1923.

Schizoporella granulata, fistulata p. 37, *ordinata* p. 38 **spp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N. S. **1**.

Scrupocellaria inermis **sp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N. S. **1** p. 18.

Smittia cellata, torquata **spp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N. S. **1** p. 43.

†*Sphenella* **gen. n.** type *polymorpha* **sp. n.** Miocene France, DUVERGIER Act. soc. Linn. Bordeaux **75** 1923 p. 170.

†*Steganoporella laevimarginata* **sp. n.** Miocene France, DUVERGIER Act. soc. Linn. Bordeaux **75** 1923 p. 161.

†*Velumella irregularis* **sp. n.** Miocene France, DUVERGIER Act. soc. Linn. Bordeaux **75** 1923 p. 160.

PHYLACTOLAEMATA.

Hislopia placoides morpha loc. ripariensis p. 265, *sabulosa, intermedia, limosa* p. 266 **m. nov.** Recent L. Baikal, ABRICOSSOFF Russ. Hydrobiol. Zeits. Saratov **3** 1924.

ENTOPROCTA.

Gonypodaria parva **sp. n.** Recent Vancouver I., O'DONOGHUE & O'DONOGHUE Contr. Canadian Biol. N. S. **1** p. 6.

VIII. MOLLUSCA

ARRANGED BY

H. B. PRESTON.

CONTENTS

	PAGE
I. Titles	2
II. Subject Index	32
III. Systematic Index:—	
Amphineura	40
Gastropoda	41
Opisthobranchia	59
Pulmonata	61
Scaphopoda	70
Pelecypoda or Lamellibranchia	70
Cephalopoda	84
Incertae Sedis	92

I.—TITLES.

1.—Abrard, R. Note sur les dépôts éocénes des environs de Royan. Bul. Soc. Géol. Paris **23** 1924 pp. 377–380.

2.—Ackermann, D. Über die Extraktstoffe von *Mytilus edulis*. Zs. Biol. München **74** 1921 pp. 67–76 **80** 1924 pp. 193–194.

3.—Ackermann, D., **Holtz,** F. and **Kutscher,** F. Über die Extraktstoffe von *Eledone moschata*. Zs. Biol. München **77** 1923 pp. 241–244 **80** 1924 pp. 155–162.

4.—Adamstone, F. B. The bottom fauna of Lake Nipigon. Univ. Toronto Stud. Biol. Ser. No. **24** 1924 No. 19 pp. 43–70.

5.—Agersborg, H. P. K. The sex of the nudibranchiate mollusca (i). With special reference to germ-cell secretions in *Melibe leonina* (Gould). Arch. biol. Liège-Paris **34** 1924 pp. 215–233.

6.—Agersborg, H. P. K. Studies on the effect of parasitism upon the tissues. (i.) With special reference to certain gasteropod molluscs. Q. J. Microsc. Sci. London **68** 1924 pp. 361–401 pls. xii–xxi.

7.—Aguilar-amat [A.]. Un Mollusco nou per a la fauna ibèrica. Buttl. Inst. Catal. N. H. Barcelona Ser. 2 **3** 1923 p. 112.

Aguilar-amat, J. B. *vide* Bofill i Poch, A.

Akimov, M. *vide* Nalivkin, W.

8.—Alderson, E. G. Note on *Ampullaria interrupta*, Sow. Proc. Malac. Soc. London **16** 1924 pp. 50–52.

9.—Alemagna, C. Osservazioni geologiche nei dintorni di Buccheri in provincia di Siracusa. Atti Acc. Gioenia Catania Ser. 5 **12** 1919–1920 Mem. xxiii pp. 1–12.

10.—Alkins, W. E. Note on the discovery of a colony of *Vitrea lucida* (Drap.) at Arnside, Westmorland. J. Conch. Leeds **17** 1924 pp. 157–158.

11.—Allen, E. The existence of a short reproductive cycle in *Anodonta imbecilis*. Biol. Bull. Wood's Hole Mass. **46** 1924 pp. 88–94.

12.—Andersen, K. Entwicklungsgeschichtliche Untersuchungen an *Paludina vivipara*. i. Teil. Die Formengestaltung der Sumpfschnecke (*Paludina vivipara*) während der Larvenzeit. Morph. Jahrb. Leipzig **53** 1924 pp. 211–258.

13.—Andersen, K. Entwicklungsgeschichtliche Untersuchungen an *Paludina vivipara*. ii. Teil. Die Entwicklung des Nervensystems bei *Paludina vivipara*, zugleich eine kritische Studie über die Torsion und Chiastoneurie der Gastropoden. Morph. Jahrb. Leipzig **54** 1924 pp. 157–204.

14.—Androussov, N. Étage Apchéronien [Apschéronien]. Mém. Com. Geol. St. Petersburg **110** 1923 pp. 1–294 pls. i–xi. [In Russian.]

15.—Ankel, W. E. Spermatozoen—Dimorphismus und Befruchtung bei *Bythinia tentaculata* L. und *Viviparus viviparus* L. Senckenbergiana Frankfurt a. M. **6** 1924 pp. 1–12.

16.—Annandale, N. Zoological results of the Percy Sladen trust expedition to Yunnan under the leadership of Professor J. W. Gregory, F.R.S. (1922). Land Molluscs. J. Asiat. Soc. Beng. Calcutta N. S. **19** 1924 pp. 385–397 pl. xvi.

17.—Annandale, N. Zoological results of the Percy Sladen trust expedition to Yunnan under the leadership of Professor J. W. Gregory, F.R.S., (1922). Aquatic gastropod molluscs. J. Asiat. Soc. Beng. Calcutta N. S. **19** 1924 pp. 399–422 pl. xvii.

18.—Annandale, N. The occurrence of *Valvata piscinalis* f. *alpestris* Blauner in Scotland. J. Conch. Leeds **17** 1924 p. 168.

19.—Annandale, N. Fauna of the Chilka Lake. Mollusca Gastropoda (revision). Mem. Ind. Mus. Calcutta **5** 1924 pp. 853–873.

20.—Annandale, N. The evolution of the shell-sculpture in freshwater snails of the family Viviparidae. Proc. R. Soc. London **B 96** 1924 pp. 60–76.

21.—Annandale, N. and **Chopra, B.** Molluscs of the Siju Cave, Garo Hills, Assam. Rec. Ind. Mus. Calcutta **26** 1924 pp. 33–40.

22.—Annandale, T. N. and **Prashad, B.** Report on a small collection of molluscs from the Chekiang Province of China. Proc. Malac. Soc. London **16** 1924 pp. 27–49.

23.—[Anon.] W. H. Golisch. Nautilus Boston Mass. **38** 1924 p. 31.

24.—[Anon.] *Ommastrephes todarus*, Delle Chiaje. Rep. Dove Mar. Lab. Cullercoats N.S. **12** 1923 p. 151.

25.—Anthony, R. Étude d'un moule interne artificiel complet d'*Hippurites radiosus* Desm. Arch. Zool. Paris **62** 1924 pp. 327–344 pl. xiv.

26.—Arabu, N. Contributions à l'étude du genre *Arcestes* Suess; ses représentants dans le Trias de la Bithynie (Asie Mineure). C.R. Acad. sci. Paris **178** 1924 pp. 643–645.

27.—Arey, L. B. Glochidial cuticulae, teeth, and the mechanics of attachment. J. Morph. Philadelphia **39** 1924 pp. 323–332 pl. i.

Arey, L. B. *vide* Crozier, W. J.

28.—Arkell, A. J. . . . *Ampullaria warnei* Phil. J. Conch. Leeds **17** 1924 pp. 154–155.

29.—Arkhanguelski, A. D. Les mollusques du crétacé supérieur du Turkestan. Livraison prémière. Mem. Com. Geol. Petrograd **152** 1916 pp. 1–57 pls. i–viii. [In Russian.]

30.—Ashby, E. A new species and sub-species of *Acanthochiton*. J. R. Soc. West Austral. Perth **10** 1924 pp. 13–15 pl. i.

31.—Ashby, E. Monograph on the Australian Lepidopleuridae; order Polyplacophora, with a description of a new species. Trans. R. Soc. S. Aust. Adelaide **47** 1923 pp. 216–223 pls. xvi–xix.

32.—Ashby, E. A review of *Ischnochiton* (*Haploplax*) *smaragdinus*, Angas, 1867, and its congeners, together with the description of two new Chitons from Papua. Trans. R. Soc. S. Aust. Adelaide **47** 1923 pp. 224–229 pls. xvi–xix.

33.—Ashby, E. Notes on a collection of Polyplacophora from Carnarvon, Western Australia, with definitions of a new genus and a new species. Trans. R. Soc. S. Aust. Adelaide **47** 1923 pp. 230–236 pls. xvi–xix.

34.—Ashby, E. A review of the Australian representatives of the genus *Cryptoplax*, order Polyplacophora. Trans. R. Soc. S. Aust. Adelaide **47** 1923 pp. 237–243 pls. xvi–xix.

35.—Ashby, E. and **Hull, A. F. B.** The Polyplacophora of King Island, Bass Strait, with description of a new subspecies. Austral. Zool. Sydney Australia **3** 1923 pp. 79–84 pl. viii figs. 1–6.

36.—Atkins, W. R. G. and **Lebour, M. V.** The habitats of *Limnaea truncatula* and *L. pereger* in relation to hydrogen ion concentration. Sci. Proc. R. Dublin Soc. **17** N. S. 1924 pp. 327–331.

Aubert de la Rue, E. *vide* Bourcart, J. and de Chételat, L.

37.—Bachrach, E. and **Cardot, H.** Développement des limaces et des limnées à différentes températures. C.R. soc. biol. Paris **91** 1924 pp. 260–262.

38.—Bachrach, E. and **Cardot, H.** Influence des refroidissements brefs et répétés sur la croissance des embryons de mollusques. C.R. soc. biol. Paris **91** 1924 pp. 1017–1019.

39.—Baker, F. C. A new *Physa* from California. Nautilus Boston Mass. **38** 1924 p. 15.

40.—Baker, H. B. New land operculates from the Dutch Leeward Islands. Nautilus Boston Mass. **37** 1924 pp. 89–94.

41.—Baker, H. B. The mollusca collected by the university of Michigan—Williamson expedition in Venezuela. Occ. Paprs. Mus. Zool. Ann Arbor Mich. No. **137** 1923 pp. 1–58 pls. i–v.

42.—Ballowitz, E. Zur Kenntnis der Cephalopodenspermien nebst einigen Bemerkungen über spiralig geformte Samenkörper. Anat. Anz. Jena **58** 1924 pp. 278–286.

43.—Bartsch, P. Breeding experiments with Cerions. Carnegie Inst. Year Book Washington (Tortugas Lab. Rep.) **23** 1924 pp. 187–189.

44.—Bartsch, P. Additional facts concerning the *Cerion* breeding experiments. J. Washington Acad. Sci. **14** 1924 p. 225.

45.—Bartsch, P. New mollusks from Santa Elena Bay, Ecuador. Proc. U. S. Nat. Mus. Washington **66** No. 2551 1924 pp. 1–9 pls. i–ii.

46.—Bartsch, P. A new shipworm from Chile. Rev. chilena Valparaiso **27** 1924 pp. 147–149.

47.—Bataller, Moluscos de la turbera del riu Matarranga, Beceit. (Terol.) Buttl. Inst. Catal. N. H. Barcelona Ser. 2 **4** 1924 pp. 22–23.

48.—Baumberger, E. Beschreibung zweier Valangienammoniten, nebst Bemerkungen über die Fauna des Gemsmättlihorizontes von Sulzi im Justistal. Eclogae Geol. Helvet. Lausanne **18** 1923 pp. 303–313 pl. viii.

49.—Bavay, A. Note sur les littorines (projet d'études). Bul. soc. zool. Paris **45** 1920 pp. 249–255.

50.—Bekker, H. Mõned uued andmed Kukruse laderne stratigraafiast ja faunast. Stratigraphical and paleontological supplements on the Kukruse stage of the Ordovician rocks of Eesti (Estonia). Geol. Inst. Toimetused. Publ. Geol. Inst. Tartu **1** 1924 pp. 1–20 pls. i–ii [pp. 3–12 in Esthonian, pp. 13–20 in English.]

51.—Belcher, T. E. *Crepidula fornicata* (L.) in Dorset. J. Conch. Leeds **17** 1924 p. 146.

52.—Bellini, R. La collina di Torino di Fronte a Chivasso. Boll. Soc. geol. ital. **42** 1924 pp. 156–166.

53.—Bellini, R. Osservazioni nell' isola di Capri a conferma dell' antico stato della regione tirrena. Boll. soc. nat. Napoli **32** 1920 pp. 125–140.

Benoit, C. *vide* Portes. F.

Bergami, G. *vide* Botazzi, F.

54.—Berry, S. S. A new zonitoid snail from Southern California. Nautilus Boston Mass. **37** 1924 pp. 130–132.

55.—Bertrand, L. and **Joleaud,** L. Sur quelques faits nouveaux relatifs aux terrains jurassiques et crétacés de l'Ouest de Madagascar. C.R. Acad. sci. Paris **178** 1924 pp. 1012–1015.

56.—Beurlen, K. Über einige neue und seltene Ammoniten aus dem Lias δ des Schwäbischen Jura. Centralbl. Min. Stuttgart **1924** pp. 147–160.

57.—Beurlen, K. Die Gattung *Rasenia* im Schwäbischen Jura. Centralbl. Min. Stuttgart **1924** pp. 245–252 281–288.

58.—Bisat, W. S. A Yorkshire carboniferous (Bowland shale) fauna in Oklahoma, U.S.A. Naturalist London **1924** pp. 86–88.

59.—Bisat, W. S. Yorkshire carboniferous Goniatites. Naturalist London **1924** pp. 182–184.

60.—Bisat, W. S. The carboniferous Goniatites of the North of England and their zones. Proc. Yorks. Geol. Soc. Halifax **20** 1924 pp. 40–124 pls. i–x.

61.—Blake, J. H. A large *Pecten* bed. Nautilus Boston Mass. **38** 1924 pp. 32–33.

62.—Blanchet, F. Sur un groupe d'ammonites éocrétacées dérivées des "Cosmoceras." Trav. Lab. geol. Grenoble **13** 1924 pp. 77–79.

Blanchet, F. *vide* Kilian, W.

63.—Blume, W. Einige Bemerkungen zum Aufsatz von H. Modell "Neue Wege der Najadenforschung." Arch. Molluskenkunde Frankfurt **56** 1924 pp. 160–168.

64.—Bofill i Poch, A. Moluscos recollits a Tortosa, Amposta i St. Carles de la Ràpita (Provincia de Tarragona) en els mesos de Maig de 1920 i 1921. Buttl. Inst. Catal. N. H. Barcelona Ser. 2 **4** 1924 pp. 98–100.

65.—Bofill i Poch, A. Moluscos de la comarca de Berga (Prov. de Barcelona) recollits en septembre de 1920. Buttl. Inst. Catal. N. H. Barcelona Ser. 2 **4** 1924 pp. 102–103.

66.—Bofill i Poch, A. Moluscos dels aluvions de Canal d'Urgell a Anglesola i Barbèns (Provincia de Lleida). Buttl. Inst. Catal. N. H. Barcelona **4** 1924 pp. 131–133.

67.—Bofill i Poch, A. and **Aguilar-amat,** J. B. Alguns Moluscos de Casblanca, Maròc francès. Buttl. Inst. Catal. N. H. Barcelona Ser. 2 **4** 1924 p. 23.

68.—Bofill i Poch, A. and **Aguilar-amat,** [J. B.]. *Zua subcylindrica* (L.) en una cova. Buttl. Inst. Catal. N. H. Barcelona Ser. 2 **4** 1924 p. 38.

69.—Bofill i Poch, [A.] and **Aguilar-Amat** [J. B.]. Alguns moluscos terrestres de Tossa (Prov. de Girona). Buttl. Inst. Catal. N. H. Barcelona Ser. 2 **4** 1924 p. 42.

70.—Bofill i Poch, [A.] and **Aguilar-Amat,** [J.B.]. Un altre molusco cavernicola. Buttl. Inst. Catal. N. H. Barcelona Ser. 2 **4** 1924 p. 83.

71.—Bogatchev, V. La faune d'eau douce de l'Eurasie. Mem. Com. Geol. Petrograd **135** 1924 pp. 1–248 pls. i–vii.

72.—Bokor, E. Beiträge zur rezenten Fauna der Abaligeter Grotte. Zool. Anz. Leipzig **61** 1924 pp. 111–121.

73.—Bolam, G. *Limax cinereo-niger,* Wolf. Trans. Nat. Hist. Soc. Newcastle **6** 1924 pp. 112–113.

74.—Bonnet, A. Anomalie de l'appareil génital de l'*Helix pomatia.* Bul. soc. zool. Paris **45** 1920 pp. 299–300.

75.—Boone, Le develloppement des ammonites. Bul. Soc. Geol. Bretagne Rennes **4** 1924 pp. 221–225 pl. vii.

76.—Borcea, I. Faune survivante de type caspien dans les limans d'eau douce de Roumanie. Note préliminaire. Ann. sci. Univ. Jassy **13** 1924 pp. 207–232.

77.—Bordage, E. Deux précurseurs en biologie; Voltaire et Bernardin de Saint-Pierre. Biologica Paris **2** 1912 pp. 135–145.

78.—Borissiak, A. and **Ivanoff,** E. Les Pélécypodes des couches jurassiques de la Russie d'Europe. v. Pectinidae. Mém. Com. Geol. Petrograd **143** 1917 pp. 1–58 pls. i–iv. [In Russian.]

79.—Borley, J. O. The marine deposits of the Southern North Sea. Min. Agric. Fish. London Fishery Investigations Ser. 2 **4** 1923 No. 6 pp. 1–73.

80.—Boswell, P. G. H. The faunal relations of the crag deposits of the Bentley District, Suffolk. Proc. Geol. Ass. London **35** 1924 pp. 212–218.

81.—Botazzi, F. and **Bergami,** G. Riproduzione sperimentale di un fenomeno di apparente automatismo muscolare. Arch. sci. biol. Napoli **6** 1924 pp. 65–93.

82.—Botazzi, F. and **Valentini,** V. Nuove recerche sul veleno della "saliva" di *Octopus macropus.*" Arch. sci. biol. Napoli **6** 1924 pp. 153–168.

83.—Bourcart, J., **Aubert de la Rue,** E., and **de Chételat,** L. Le gisement de Pliocène marin du Lac de Scutari d'Albanie. Bul. Soc. geol. Paris **23** 1924 pp. 271–274.

84.—Boutan, M. Particularités de la coquille de *Stenogyra decollata.* Bul. Soc. hist. nat. Alger **15** 1924 pp. 143–144.

85.—Bowell, E. W. Radulae of mollusca. J. Quek. Microsc. Cl. London **15** 1924 pp. 57–64.

86.—Bowell, E. W. The mounting of radulae for photomicrography. J. R. Microsc. Soc. London **1924** pp. 292–294.

87.—Brambell, F. W. R. The nature and origin of yolk. Experimental studies of the oöcytes of *Helix aspersa* and *Patella vulgata.* Brit. J. Exper. Biol. Edinburgh **1** 1924 pp. 501–517.

88.—Brambell, F. W. R. and **Gatenby,** J. B. On the supposed homology of the golgi elements of the mammalian nerve cell, and the nebenkern batonettes of the genital cells of invertebrates. Sci. Proc. R. Dublin Soc. **17** N. S. 1924 pp. 275–280 pl. xvii.

89.—Branson, E. B. The Devonian of Missouri. With chapters on the Bailey limestone by **Tansey,** V. O., and The Little Salina Limestone by **Stewart,** G. A. Missouri Bur. Geol. Mines Rolla Miss. **1922** pp. 1–279 pls. i–lxxi.

Brighton, A. G. *vide* Whitehouse, F. W.

90.—Brinkmann, R. Über eine Scholle von Oberem Lias auf Wollin. Centralbl. Min. Stuttgart **1924** pp. 444–448.

91.—Brookes, A. E. Descriptions of two new species of gastropod shells. Trans. Proc. N. Zeal. Inst. Wellington **55** 1924 pp. 153–154 pl. vii.

92.—Brown, H. J. W. Notes on the geology of the district around Wrotham and Borough Green, Kent. Proc. Geol. Ass. London **35** 1924 pp. 79–83.

93.—Brown, J. C. On the occurrence of *Ostrea gryphoides* Schlotheim in Calcutta. J. Asiat. Soc. Beng. Calcutta **19** 1924 pp. 75–80 pl. x.

94.—Brüel, L. Über das Nervensystem der Heteropoden. ii. Das Nervensystem von *Carinaria* und seine Herleitung von den Prosobranchiern. Zool. Anz. Leipzig **59** 1924 pp. 113–127 190–199.

95.—Brüel, L. Mitteilungen aus Museen usw. Berichtigung. Zool. Anz. Leipzig **59** 1924 p. 336.

96.—Brues, C. T. Observations on animal life in the thermal waters of Yellowstone Park, with a consideration of the thermal environment. Proc. Amer. Acad. Arts. sci. Boston **59** 1924 pp. 369–437. [Mollusca at p. 416.]

97.—Buckman, S. S. in **O'Neill,** J. J. The geology of the Arctic coast of Canada West of the Kent Peninsula. Rep. Canad. Arct. Exped. 1913–18 Ottawa **11** pt. A 1923. [Mollusca at p. 14A.]

98.—Buckmann, W. Über den Pharynx der Heteropoden. Zs. ges. Anat. München **73** 1924 pp. 501–540 pls. ix–x.

99.—Bucknill, C. E. R. On *Turbonilla powelli*, nov. spec. Proc. Malac. Soc. London **16** 1924 p. 122.

100.—Buen, O. de. Croisiére de la Giralda (1920–1921). Liste des operations. Bul. Inst. Océan. Monaco No. **445** pp. 1–15.

101.—Butterfield, W. R. Notes on the local fauna and flora and meteorology for 1923. Hastings and East Sussex Nat. **4** 1924. [Mollusca at p. 7.]

102.—Büttner, K. Die Land- und Süsswassermollusken der Insel Langeoog. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 82–86 180.

103.—C[alman], W. T. Marine Structures: their deterioration and preservation. Report of the Committee on Marine Piling Investigations of the Division of Engineering and Industrial Research of the National Research Council. . . Nature London **114** 1924 pp. 744–745.

104.—Camps, N. C. Sobre la estructura microscópica del corazón de los Cefalopodos. Bol. Soc. Esp. Hist. Nat. Madrid **24** 1924 pp. 313–320.

105.—Cardot, H. Sur quelques anomalies des oeufs et des embryons de gastéropodes pulmonés. C.R. soc. biol. Paris **91** 1924 pp. 1019–1022.

106.—Cardot, H. Observations physiologiques sur les embryons des gastéropodes pulmonés. J. physiol. path. gen. Paris **22** 1924 pp. 575–586.

Cardot, H. *vide* Bachrach, E.

107.—Carleton, H. M. and **Robson,** G. C. On the histology and function of certain secondary sexual organs in the cuttle fish *Doratosepion confusa*. Proc. R. Soc. London Ser. B **96** 1924 pp. 259–271.

108.—Carlson, A. J. A note on the action of curare, atropine and nicotine on the invertebrate heart. J. Gen. Physiol. Baltimore **4** 1922 pp. 559–568.

109.—Carter, C. S. *Vitrea lucida*, etc., at Market Rasen. Naturalist London **1924** p. 18.

110.—Carter, G. S. On the structure and movements of the latero-frontal cilia of the gills of *Mytilus*. Proc. R. Soc. London B **96** 1924 pp. 115–122.

111.—Cate, J. ten. Contributions à la physiologie comparée du canal stomaco-intestinal. ii. Mouvements rythmiques spontanés de l'esotmac isolé d'*Helix pomatia*. Arch. Néerl. Sci. Soc. Holl. Haarlem **9** 1924 pp. 199–212.

112.—Cawston, F. G. Some observations on the source of Bilharzia infection and the combined treatment of a case in Natal. Ann. Trop. Med. London **18** 1924 pp. 1–2.

113.—Cawston, F. G. The source of South African trematodes. Ann. Trop. Med. London **18** 1924 pp. 343–346.

114.—Cawston, F. G. Distribution of snails serving as intermediate hosts of flukes in South Africa. Parasitol. Cambridge **16** 1924 pp. 67–68.

115.—Cawston, F. G. The smaller South African shells that harbour Cercariae. Trans. R. Soc. S. Africa Cape Town **12** 1924 pp. 13–15.

116.—Caziot, [E.]. L'*Helix hammonis* et du *Turbo bidentatus* de Strom. Ann. Soc. Linn. Lyon **70** 1924 pp. 100–101.

117.—Caziot, E. Étude sur les *Helix* du groupe *paulini*. Bul. soc. zool. Paris **45** 1920 pp. 300–305.

118.—Caziot, [E.]. Espèces rares de la faune marine de la rade de Villefranche-sur-Mer (A.–M.). Bul. soc. zool. Paris **46** 1921 pp. 114–116.

119.—Caziot, [E.]. Note sur deux espèces du genre *Vivipara*. Bul. soc. zool. Paris **48** 1923 pp. 8–11.

120.—Caziot, [E.]. Liste des coquilles marines recueillies en un point particulier du port de Nice. Bul. soc. zool. Paris **48** 1923 pp. 129–130.

121.—Charpiat, R. Recherches sur l'évolute des Cerithidae tertiaires du bassin de Paris particulièrement et sur l'importance des caractères internes de leur coquille pour une classification naturelle. Bul. Soc. Sci. Seine et Oise Ser. 2 **4** 1923 fasc. 6 7 and 8 pp. 1–297 pls. i, i bis, ii, ii bis.

122.—Checchia-Rispoli, G. Sopra alcuni pettinidi neogenici della capitanata. Boll. Uff. geol. Ital. Roma **49** No. 8 1923 pp. 1–6 pl.

123.—Checchia-Rispoli, G. Sui terreni terziari inferiori del versante settentrionale delle Madonie. Mem. serv. alla Descr. C. geol. Ital. **6** pt. 2 1916 pp. 1–109 pls. i–ix. [Mollusca at pp. 75 91.]

Chètelat, L. de *vide* Bourcart, J. and Aubert de la Rue, E.

Chopra, B. *vide* Annandale, N.

124.—Christensen, E. Neue Beiträge zum Bau der Belemniten. Neues Jahrb. Min. Geol. Paläont. Stuttgart Beil. Bd. **51** 1924 pp. 118–158 pls. iv–vi.

Chumley, J. *vide* Murray, J.

125.—Ciria, F. J. Notas para el estudio de la immutabilidad especifica en los moluscos variaciones que sufre. Bol. Soc. Iber. Zaragoza **23** 1924 pp. 41–47.

126.—Ciria, F. J. Notas sobre malacología. ii. Notas biológicas sobre el *Helix adspersa* Drapernaud. Bol. Soc. Iber. Zaragoza **22** 1923 pp. 99–100.

127.—Cisneros, D. J. de. Encuentro de otro yacimiento de Lias alpino en el barranco de las Cuevas, al W. de la Romana (Alicante). Bol. Soc. Esp. Hist. Nat. Madrid **24** 1924 pp. 261–262.

128.—Cisneros, [D.] J. de. Breve noticia de los yacimientos del Collado de la Campana. Bol. Soc. Esp. Hist. Nat. Madrid **24** 1924 pp. 377–378.

129.—Cisneros, D. J. de. Particularidades observadas en algunos ammonites piritosos. Bol. Soc. Iber. Zaragoza **23** 1924 pp. 74–78.

130.—Clapp, W. F. New species of shipworms in Bermuda. Proc. Amer. Acad. Arts. Sci. Boston **59** No. 12 1924 pp. 279–294 pls. i–iii.

Clapp, N. A. *vide* Maynard, C. J.

131.—Clark, A. H. A monograph of the existing crinoids. Bul. U. S. Nat. Mus. Washington **82** [1921] pp. i–xxv 1–795 pls. i–lvii. [Mollusca at p. 645.]

132.—Clark, B. L. A new family and new genus from the Tertiary of the Pacific Coast. Univ. Cal. Pub. Geol. Berkeley **14** 1922 No. 4 pp. 115–122 pls. xiii xiv.

133.—Clarke, W. J. Dispersal of molluscs by commerce. Naturalist London **1924** p. 363.

134.—Clementi, A. Contributo alla conoscenza della pressione osmotica nel' organismo degli invertebrati terrestri. Atti Acc. Lincei Roma **33** Sem. i 1924 pp. 362–364.

135.—Clench, W. J. A new species of *Physa* from Texas. Nautilus Boston Mass. **38** 1924 pp. 12–13.

136.—Clench, W. J. Radula technique for *Physa*. Nautilus Boston Mass. **38** 1924 pp. 13–14.

137.—Cobbold, E. S. The Cambrian fossils from the Breccia-material in the cores of the boring of Nechells Gas-Works, Birmingham (embodying the identifications and notes made by Edgar Sterling Cobbold, F.G.S.). Q. J. Geol. Soc. London **80** 1924 pp. 365–373.

138.—Cockerell, T. D. A. *Helix pisana* in California. Amer. Nat. New York **58** 1924 pp. 190–192.

139.—Cockerell, T. D. A. Land mollusca from the maritime province of Siberia. Ann. Mag. Nat. Hist. London Ser. 9 **13** 1924 pp. 579–583.

140.—Cockerell, T. D. A. *Helix pisana* var. *sagittifera* Taylor. J. Conch. Leeds **17** 1924 p. 153.

141.—Cockerell, T. D. A. The athoracophorid slugs. J. Conch. Leeds **17** 1924 p. 153.

142.—Cockerell, T. D. A. *Nesopupa armata* (Pease). J. Conch. Leeds **17** 1924 p. 168.

143.—Cockerell, T. D. A. Snails of the genus *Succinea* from the maritime province of Siberia. J. Washington Acad. Sci. **14** 1924 pp. 366–369.

144.—Cockerell, T. D. A. The large black slug of Honolulu. Nature London **114** 1924 pp. 502–503.

145.—Cockerell, T. D. A. *Eulota maackii*, a Siberian snail. Nautilus Boston Mass. **38** 1924 pp. 62–65.

146.—Collet, L. W. Sur quelques ammonites du Barrémien de Colombie. Remarques sur les genres *Carstenia* Hyatt et *Pulchellia* Uhlig. Eclogae geol. Helvet Bâle **18** 1924 pp. 485–493 pl. xv.

147.—Colosi, G. Contributo alla conoscenza anatomica e sistematica dei Vaginulidi sud-americani. An. Mus. Nac. Buenos Aires **31** 1923 pp. 475–517.

148.—Cooke, C. W. American and European Eocene and Oligocene molluscs. Bul. Geol. Soc. Amer. New York **35** 1924 p. 174.

149.—Cooper [J. E.]. A scalariform example of *Planorbis vortex* (Linn.), from a ditch at Ely. Proc. Malac. Soc. London **16** 1924 p. 2.

150.—Cooper, J. E. Note on *Planorbis stroemi*, Westerlund (= *Acronicus*, Férussac), living in the Thames. Proc. Malac. Soc. London **16** 1924 p. 15.

151.—Cornet, J. Sur quelques roches et fossiles de la Meule du Hainaut de la collection César Plumat. Ann. Soc. géol. Belgique Liège **46** 1923 pp. B 138–B 140.

152.—Cornet, J. Le Cénomanien entre Mons et l'Escaut. Ann. Soc. géol. Belgique Liège **46** 1923 pp. M 21–M 66.

153.—Corroy, G. Molières, Gammal, Saint-Ambroix. Excursion du 13 septembre. Bul. soc. géol. Paris **23** 1924 pp. 473–481.

154.—Corroy, G. Brouzet, La Serbe du Bouquet, Seynes, Klippe de la Liquiere. Excursion du 15 septembre. Bul. soc. géol. Paris **23** 1924 pp. 484–487.

155.—Cossmann, M. Deuxième supplément aux mollusques éocéniques de la Loire-Inférieure. Bul. soc. sci. nat. Nantes Ser 4 **1** pp. 117–140.

156.—Cossmann, M. Faune pliocénique de Karikal. J. conchyliol. Paris **68** 1924 pp. 85–150 pls. iii–ix.

157.—Cossmann, M. Extension dans les Deux-Sèvres de la faune du Callovien de Montreuil-Bellay. Mém. Soc. Geol. Min. Bretagne **1** 1924 pp. 1–53 pls. i–vii.

158.—Cossmann [M.] and **Peyrot.** Conchologie néogénique de l'Aquitaine (Suite). Actes soc. linn. Bordeaux **75** 1923 pp. 193–318 pls. viii–xviii.

159.—Cottreau, J. Paléontologie de Madagascar. x. Fossiles crétacés de la côte orientale. Ann. paléont. Paris **11** 1922 pp. 109–192 pls. i–xix. [Mollusca at p. 140.]

160.—C[owan], D. *Amphorina aurantiaca* (A. and H.). Rep. Dove Mar. Lab. Cullercoats N. S. **12** 1923 p. 151.

161.—Cox, L. R. A Bajocian-Bathonian outcrop in the Jordan Valley, and its molluscan remains. Ann. Mag. Nat. Hist. London Ser. 9 **13** pp. 169–180.

162.—Cox, L. R. A Triassic fauna from the Jordan Valley. Ann. Mag. Nat. Hist. London Ser. 9 **14** 1924 pp 52–96 pls. i–ii.

163.—Cox, L. R. Some late kainozoic pelecypoda from the Aru Islands. Geol. Mag. London **61** 1924 pp. 56–63.

164.—Cox, L. R. *Vertigo vectensis*, n. sp., from the Bembridge limestone, Isle of Wight. Proc. Malac. Soc. London **16** 1924 pp. 123–124.

165.—Craifaleanu, A. D. Studi sull' emocianina. ii. Ricerche chimico-fisiologiche sul sangue di *Octopus* ed *Eledone*. Boll. soc. nat. Napoli **32** 1920 pp. 120–124.

166.—Craifaleanu, A. D. Studi sull' emocianina. iii. L'azione dei gas e dei cianuri alcalini nell' emocianina. Boll. soc. nat. Napoli **32** 1920 pp. 141–153.

167.—Craifaleanu, A. D. Studi sull' emocianina. iv. L'azione dei sali dei metalli pesanti sull' emocianina. Boll. soc. nat. Napoli **32** 1920 pp. 154–163.

168.—Crampton, H. E. New and significant species of *Partula* from Moorea, Society Islands. Nautilus Boston Mass. **37** 1924 pp. 109–118 pl. vi.

169.—Crampton, H. E. The coincident production of dextral and sinistral young in the land-gasteropod *Partula*. Science New York N.Y. **59** 1924 pp. 558-559.

170.—Crapper, E. *Paludestrina jenkinsi* in Fife and Forfar. J. Conch. Leeds **17** 1924 p. 137.

171.—Cretin, A. La chaux et le phosphore dans les tissus ; de quelques méthodes nouvelles de recherche. Leurs resultats. C.R. Assoc. Anat. Paris **18** 1923 pp. 163–171.

172.—Crick, G. G. On Upper Cretaceous Cephalopoda from Portuguese East Africa. Trans. Geol. Soc. S. Africa, Johannesburg **26** 1924 pp. 130–140.

173.—Crozier, W. J. On the control of the response to shading in the branchiae of *Chromodoris*. J. Gen. Physiol. Baltimore **1** 1919 pp. 585–591.

174.—Crozier, W. J. The analysis of neuromuscular mechanisms in *Chiton*. J. Gen. Physiol. Baltimore **2** 1920 pp. 627–634.

175.—Crozier, W. J. Correspondence of skin pigments in related species of nudibranchs. J. Gen. Physiol. Baltimore **4** 1922 pp. 303–304.

176.—Crozier, W. J. and **Arey,** L. B. The heliotropism of *Onchidium*: a problem in the analysis of animal conduct. J. Gen. Physiol. Baltimore **2** 1920 pp. 107–112.

177.—Crozier, W. J. and **Federighi,** H. Phototropic circus movements of *Limax* as affected by temperature. J. Gen. Physiol. Baltimore **7** 1924 pp. 151–169.

178.—Crozier, W. J. and **Federighi,** H. Suppression of phototropic circus movements of *Limax* by strychnine. J. Gen. Physiol. Baltimore **7** 1924 pp. 221–224.

179.—Crozier, W. J. and **Pilz,** G. F. The locomotion of *Limax*. i. Temperature coefficient of pedal activity. J. Gen. Physiol. Baltimore **6** 1924 pp. 711–721.

180.—Csiki, E. Mollusca: in Fauna Regni Hungariae Budapest **1918** pp. 1–44.

181.—Daguin, F. Renseignements sur les couches a *Helix* du Rarb. J. conchyliol. Paris **68** 1924 pp. 153–154.

[**Dalgliesh**], G. *vide* Dalgliesh, M.

182.—Dalgliesh, M. and [**Dalgliesh**], G. Additional notes on the land and freshwater mollusca of Sussex. J. Conch. Leeds **17** 1924 pp. 178–182.

183.—Dall, W. H. Notes on molluscan nomenclature. Bul. Biol. Soc. Washington **37** 1924 pp. 87–90.

184.—Dall, W. H. On the value of nuclear characters in the classification of marine gastropods. J. Washington Acad. Sci. **14** 1924 pp. 177–180.

185.—Dall, W. H. Note on the discovery of *Orygoceras* in the Idaho Tertiaries. Nautilus Boston Mass. **37** 1924 pp. 97–98.

186.—Dall, W. H. A new Alaskan *Puncturella*. Nautilus Boston Mass. **37** 1924 p. 133.

187.—Dall, W. H. A remarkable Caecid from Florida. Nautilus Boston Mass. **38** 1924 pp. 7–8.

188.—Dall, W. H. in **O'Neill,** J. J. Report of Tertiary fossils from Brock River. Rep. Canad. Arct. Exped. 1913–1918 Ottawa **11** pt. A 1923 pp. 27A—28A pl. xxxv.

189.—Dall, W. H. in **O'Neill,** J. J. Report on the Pleistocene fossils collected on the Arctic coast. Rep. Canad. Arct. Exped. 1913–18 Ottawa **11** pt. A 1923 pp. 30A—33A.

190.—Dalloni, M. Contribution à l'étude des terrains tertiaires de la Thessalie et de l'Épire. Bul. Soc. Geol. Paris **23** 1924 pp. 284–294.

191.—Das-Gupta, H. C. On the fossil Pectinidae from Hathab, Bhavanager State (Kathiawar). J. Asiat. Soc. Beng. Calcutta **19** 1924 pp. 81–86 pl. xi.

192.—Dautzenberg, P. J. G. Hidalgo. J. conchyliol. Paris **68** 1924 pp. 167–170.

Dautzenberg, P. *vide* **Dollfus,** G. F.

193.—Dautzenberg, P. and **Fischer,** P. H. Coquilles trouvées dans le gisement préhistorique de l'ile Houat (Morbihan). J. conchyliol. Paris **68** 1924 pp. 155–157.

David, E. *vide* Dun, W. S.

194.—Davies, A. M. Type specimens. Geol. Mag. London **61** 1924 pp. 527–528.

Davis, A. G. *vide* Wrigley, A.

195.—Dean, J. D. Obituary notice : A. D. R. Bacchus, F.E.S. J. Conch. Leeds **17** 1924 p. 161.

196.—Dean, J. D. On albinism and its known occurrence in the European Clausiliidae. J. Conch. Leeds **17** 1924 pp. 170–173.

197.—Dean, J. D. *Cyclostoma elegans* var. *violaceus* Desm. in Glamorgan. J. Conch. Leeds **17** 1924 p. 173.

198.—Dean, J. D. *Hyalinia lucida* (Drap.) var. *obscurata* Porro. J. Conch. Leeds **17** 1924 p. 182.

199.—Delap, M. J. Further notes on the plankton of Valentia Harbour. Irish Nat. Dublin **33** 1924 pp. 1–6.

200.—Demanet, F. Le Waulsortien de Sosoye et ses rapports fauniques avec le Waulsortien d'age Tournaisien. supérieur. Mem. Inst. Geol. Univ. Louvain **2** 1923 pp. 39–285 pls. iii–xiv.

201.—Derjugin, K. Das Barents-Meer längs dem Kola-Meridian (33° 30′ östl. L.). Intern. Rev. Hydrobiol. Leipzig **12** 1924 pp. 145–174.

202.—Desio, A. Sulla costituzione geologica delle isole di Piscopi, Simi, Lero, Lipso e Patmo (Mare Egeo). Atti Acc. Lincei Roma **33** Sem. i 1924 pp. 358–361.

203.—Diener, C. Über triadische Cephalopoden, Gastropoden und Brachiopoden von der Insel Kotelugi (Neu Sibirien). Bul. Acad. Sci. Russ. St. Petersburg **8** 1914 pp. 899–900. [In Russian.]

204.—Dietrich, W. O. Zur Paläontologie und Stratigraphie der Kreide und des Tertiärs in der ostkaribischen Kordillere Venezuelas. Centralbl. Min. Stuttgart **1924** pp. 181–187.

205.—Dollfus, G. F. and **Dautzenberg,** P. Description d'un hélicéen fossile du Maroc. J. conchyliol. Paris **68** 1924 pp. 151–152.

206.—Dollfus, R. P. Contribution à la faune des invertébres du banc de Rockall. (Materiaux récoltés par M. G. Hamel pendant la croisière du "Pourquoi Pas ?" sous le Commandement du Dr. J. B. Charcot.) Bul. Inst. Océan. Monaco No. **438** 1924 pp. 1–28. [Mollusca at p. 20.]

207.—Dombrovsky, B. S. [Note on the geological conditions of a bed of fossil mammal bones in the locality Eldar, province Tiflis.] Trav. Mus. Geol. Mincr. P. le G. près l'Acad. Imp. Sci. Petrograd **8** 1916 (for 1914) p. 231. [In Russian.]

208.—Domet de Vorges, A. Quelques observations sur les genres *Unio* et *Anodonta*. Bul. soc. zool. Paris **48** 1923 pp. 20–22.

209.—Dorello, P. Osservazioni sopra il corpo erettile del pene nel genere *Helix*. Atti Acc. Lincei Roma **33** Sem. i 1924 pp. 412–415.

210.—Dorello, P. Contributo alla conoscenza della biologia dei nemaspermi nei gastropodi pulmonati. Atti Acc. Lincei Roma **33** Sem. ii 1924 pp. 341–344.

211.—Dun, W. S. and **David,** E. Notes on the occurrence of *Gastrioceras* at the Irwin River Coal-Field, W.A. J. Proc. R. Soc. N. S. Wales Sydney **56** 1922 for 1923 pp. 249–252 pls. xi–xiii.

212.—Duval, M. Sur la teneur en chlorure de sodium du sang de quelques invertébrés marins. C.R. Acad. sci. Paris **179** 1924 pp. 706–708.

213.—Duval, M. Reaction ionique du sang de quelques invertébrés. C.R. Acad. sci. Paris **179** 1924 pp. 1629–1631.

214.—Eaton, H. N. A Vernon Shale (Silurian) fauna in central New York. New York State Mus. Bul. Albany **253** 1924 pp. 111–116 pl.

215.—Ehlers, G. M. and **Hussey,** R. C. A new gastropod and a new cephalopod from the Devonian of Michigan. Papers Mich. Acad. Sci. **1** 1921 pp. 248–252 pls. xxxvii–xxxviii.

216.—Elles, G. L. Evolutional palaeontology in relation to the lower Palaeozoic rocks. Rep. Brit. Ass. London **91** 1924 pp. 83–107.

217.—Ellis, A. E. Mollusca at Flamborough. J. Conch. Leeds **17** 1924 pp. 149–153.

218.—Ellis, A. E. Notes on some British Helicidae. J. Conch. Leeds **17** 1924 pp. 162–167.

219.—Ellis, A. E. Land mollusca on the Mewstone. J. Conch. Leeds **17** 1924 pp. 187–188.

220.—Ellis, A. E. Mollusca in the neighbourhood of Market Harborough. J. Conch. Leeds **17** 1924 pp. 188–192.

221.—Elmhirst, R. Notes on the breeding and growth of marine animals in the Clyde Sea Area. Rep. Scott. Marine Biol. Ass. Glasgow **1922** for 1923 pp. 19–43. [Mollusca at p. 39.]

222.—Emery, D. L. Collecting in Southern Florida, the Bahamas and Cuba. Nautilus Boston Mass. **38** 1924 pp. 56–62.

223.—Ernst, W. Zur Stratigraphie und Fauna des Lias ζ im nordwestlichen Deutschland. Palaeontographica Stuttgart **66** 1924 pp. 1–126 (97–222) pls. i (vii)–viii (xiv).

224.—Eyerdam, W. Marine shells of Drier Bay, Knight Island, Prince William Sound, Alaska. Nautilus Boston Mass. **38** 1924 pp. 22–28.

225.—Fadda, G. Della funzione dei considetti spermatozoi vermiformi in *Murex trunculus* Lin. Natura Milano **14** 1923 pp. 107–117.

226.—Farnie, W. C. The development of *Amphibola crenata* (Martyn). Q. J. Microsc. Sci. London **68** 1924 pp. 453–469.

227.—Faust, E. C. The known distribution of the molluscan hosts of *Schistosoma japonicum* in the Far East considered in the light of the known distribution of *Schistosomiasis japonica* J. Parasitology Urbana Ill. **11** 1924 p. 107.

Federighi, H. *vide* Crozier, W. J.

228.—Ferriss, J. H. On the Rio Grande. Nautilus Boston Mass. **38** 1924 pp. 37–43.

229.—Ferronnière, G. Le calcaire de la Grange près Chalonnes (Maine-et-Loire). Bul. soc. sci. nat. Nantes Ser. 4 **1** 1921 pp. 1–34 pls. i–ii.

230.—Finlay, H. J. Some necessary changes in names of New Zealand mollusca. Proc. Malac. Soc. **16** 1924 pp. 99–107.

231.—Finlay, H. J. New shells from New Zealand tertiary beds. Trans. Proc. N. Zeal. Inst. Wellington **55** 1924 pp. 450–479 pls. xlviii–li.

232.—Finlay, H. J. New Zealand tertiary rissoids. Trans. Proc. N. Zeal. Inst. Wellington **55** 1924 pp. 480–494 figs.

233.—Finlay, H. J. The molluscan fauna of Target Gully: Part I. Trans. Proc. N. Zeal. Inst. Wellington **55** 1924 pp. 495–516.

234.—Finlay, H. J. Additions to the recent molluscan fauna of New Zealand. Trans. Proc. N. Zeal. Inst. Wellington **55** 1924 pp. 517–526 pl. lii.

235.—Finlay, H. J. The family Liotiidae, Iredale, in the New Zealand tertiary: Part I the genus *Brookula*. Trans. Proc. N. Zeal. Inst. **55** 1924 pp. 526–531 pl. liii.

236.—Finlay, H. J. Preliminary note on the Clifden beds. Trans. Proc. N. Zeal. Inst. Wellington **55** 1924 pp. 534–538.

Fischer, P. H. *vide* Dautzenberg, P.

237.—Foerste, A. F. Silurian cephalopods of Northern Michigan. Contrib. Mus. Geol. Univ. Mich. **2** pt. 3 1924 pp. 19–85 pls. i–xvii.

238.—Fossa-Mancini, E. Rocce fossilifere eoceniche, o di aspetto eocenico, del Ladak (campioni raccolti dalla spedizione Italiana nel l'Asia centrale 1913–1914). Atti Acc. Lincei Roma **33** Sem. i 1924 pp. 305–309.

239.—Fossa-Mancini, E. Il terziario nei dintorni di Orosei (Sardegna orientale). Atti Acc. Lincei Roma **33** Sem. ii 1924 pp. 177–182.

240.—Fox, W. J. Some unpublished plates of Conrad's "Unionidae." Nautilus Boston Mass. **38** 1924 pp. 28–29.

241.—Frankenberger, Z. Sur le cycle sécrétoire des cellules granuleuses (cellules a ferment) dans les glandes salivaires des gastéropodes pulmonées. Arch. Anat. microsc. Paris **19** 1923 pp. 211–240 pls. x–xi.

242.—Frankenberger, Z. Über eine neue Form des chordoiden blasigen Stützgewebes. Arch. mikroskop. Anat. Entw. Berlin **101** 1924 pp. 667–675.

243.—Frankenberger, Z. Die Molluskenfauna der böhmischen Masse in ihren Entwicklungs- und Verwandtschaftsbeziehungen. Verh. Zool. Bot. Ges. Wien **65** 1915 pp. 449–476.

244.—Frebold, H. Ammonitenzonen und Sedimentationszyklen in ihren Beziehung zueinander. Centralbl. Min. Stuttgart 1924 pp. 313–320.

245.—Frédérix, G. La faune Paléozoique inférieure des environs de la ville de Krasnooufimsk. Mém. Com. Géol. Petrograd **109** 1915 pp. 1–117 pl. i–x. [In Russian.]

246.—Frenguelli, J. Conchas de "Borns" en los paraderos indigenos del Rio San Roque (Sierra Chica de Córdoba Departamento de Punilla). Bol. Ac. Córdoba Buenos Aires **26** 1924 pp. 404–418.

247.—Frierson, L. S. Interesting facts in the history of *Unio orbiculatus* Hildreth and *U. abruptus* Say. Nautilus Boston Mass. **37** 1924 pp. 135–137.

248.—Fucini, A. iv. Cefalopodi in **Zaccagna,** D. Itinerari geologici nella Tripolitania occidentale. Mem. Descr. Carta Geol. Ital. Roma **18** 1919 pp. 118–126 pls. ix–x.

249.—Fuente, J. M. de la. Enumeración de las especies zoológicas que han sido descritos por primera vez, o se describen ahora, sobre ejemplares procedentes de la provincia de Cuidad Real. Primer suplemento. Bol. Soc. Esp. Hist. Nat. Madrid **24** 1924 pp. 203–207.

250.—Fulton, [H. C.]. A sinistral specimen of *Liguus virgineus* from Haiti. Proc. Malac. Soc. London **16** 1924 p. 2.

251.—Fyscher, G. Yorkshire naturalists at Holme-on-Spalding Moor. —Mollusca. Naturalist London **1924**. p. 270.

252.—Fyscher, G. Yorkshire naturalists at Ravenscar. Naturalist London **1924** p. 273.

253.—Fyscher, G. Yorkshire naturalists at Scarthingwell Park. Naturalist London **1924** p. 345.

254.—Fyscher, G. Yorkshire naturalists in Teesdale. Naturalist London **1924** p. 348.

255.—Gagel, C. Zur Eemfauna. Zs. D. geol. ges. Berlin B Monatsb. **75** 1924 pp. 228–229.

256.—Gambetta, L. Alcuni vaginulidi sud-americani. Boll. Musei zool. anat. comp. Torino No. 11 **38** 1923 pp. 1–15.

257.—Gardiner, A. *Acanthochites discrepans* (Brown), *fascicularis* (Linné) and *Callochiton laevis* (Montagu) at Chideock, Dorset. J. Conch. Leeds **17** 1924 p. 148.

258.—Gardner, J. Coastal Plain and European Miocene and Pliocene molluscs. Bul. Geol. Soc. Amer. New York **35** 1924 p. 175.

259.—Gardner, J. A. Fossiliferous marine Wilcox in Texas. Amer. J. Sci. New Haven Conn. **7** 1924 pp. 141–145.

260.—Garth, T. R. Correction of name of snail. Science New York N.Y. **60** 1924 pp. 83–84.

261.—Garwood, E. J. and Goodyear, E. The lower carboniferous succession in the Settle District and along the line of the Craven faults. Q. J. Geol. Soc. London **80** 1924 pp. 184–273 pls. x–xxi.

262.—Gaster, C. T. A. The Chalk of the Worthing District, Sussex. Proc. Geol. Ass. London **35** 1924 pp. 89–110 pl. viii.

Gatenby, J. B. *vide* Brambell, F. W. R.

263.—Gatuev, S. Les espèces néogenes russes du genre *Modiolus*. Bul. Acad. sci. Russe Petrograd **9** 1915 p. 935. [In Russian.]

Gaylord, E. G. *vide* Hanna, G. D.

264.—Gemmellaro, M. Il "Trias" dei dintorni di Palermo. Parte I La fauna triassica dei calcari delle cave di Bellolampo (Palermo), Giorn. sc. nat. econ. Palermo **33** 1923 pp. 127–198 pls. A + i–iv.

265.—Gerth, H. Ausbildung und Fauna der mesozoischen Ablagerungen in der andinen Geosynklinale im Bereich der argentinischen Kordillere. Geol. Rdsch. Berlin **14** 1923 pp. 90–95.

266.—Geyer, D. *Planorbis calculiformis* Sdbgr. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 87–90.

267.—Geyer, D. Quartärmollusken und Quartärklima. Geol. Rdsch. Berlin **15** 1924 pp. 341–352.

268.—Ghosh, E. N. On the anatomy of *Parallepipedum* Klein (Mollusca). Proc. Zool. Soc. London **1924** pp. 1047–1052.

269.—Gilchrist, J. D. F. Note on the shells of *Schizoderma spengleri*. Trans. R. Soc. S. Africa Cape Town **12** 1924 p. iv.

270.—Gillet, S. Remarques sur le rameau d'*Avicula oxytoma inaequivalvis* Sow. L. Bul. Soc. géol. Paris 23 1924 pp. 450–455.

271.—Goddard, T. R. *Pyramidula rotundata* f. *alba*. Moquin-Tandon. Trans. Nat. Hist. Soc. Newcastle **6** 1924 pp. 113–114.

272.—Gomez, J. R. Nuevos fósiles del Vallés-Panadés (Barcelona). Bol. Soc. Esp. Hist. Nat. Madrid **24** 1924 pp. 28–35.

273.—Goodrich, C. Some old Pleurocerids and a new one. Nautilus Boston Mass. **38** 1924 pp. 43–48.

Goodyear, E. *vide* Garwood, E. J.

274.—Goranson, R. W. A correlation of the Mesozoic formations of the Pacific coast of North America. Amer. J. Sci. New Haven Conn. **8** 1924 pp. 159–182.

275.—Grabau, A. W. A lower Cretaceous ammonite from Hongkong. Bul. Geol. Surv. China Peking **5** 1923 pp. 199–207.

276.—Grabau, A. W. Contribution to the fauna of the Kweichow formation of Central China. Bul. Geol. Surv. China Peking **5** 1923 pp. 209–218.

277.—Grabau, A. W. Cretaceous fossils from Shantung. Bul. Geol. Surv. China Peking **5** 1923 pp. 143–181.

278.—Grabau, A. W. Cretaceous mollusca from North China. Bul. Geol. Surv. China Peking **5** 1923 pp. 188–197.

279.—Gray, J. The mechanism of ciliary movement.—iv. The relation of ciliary activity to oxygen consumption. Proc. R. Soc. London B **96** 1924 pp. 95–114.

280.—Gregorio, A. de. Monografia dei fossili titonici de "Casale di Sopra" (Busambra) conservati nel mio privato gabinetto (Zona a *Terebratula diphya* e *janitor*). Ann. Geol. Pal. Palermo [formerly Turin] **36** 1922 pp. 3–28 pls. i–xii.

281.—Gregory, H. E. Report of the director for 1923. Bul. Bernice Pauahi Mus. Honolulu Bul. **10** 1924. [Mollusca at p. 9.]

282.—Gregory, J. W. The geological relations of the Oil Shales of Southern Burma. Geol. Mag. London **60** 1923 pp. 152–159 p. iv.

283.—Grensted, L. W. *Vertigo pusilla* in South Lancashire. J. Conch. Leeds **17** 1924 p. 160.

284.—Grensted, L. W. An islet fauna. J. Conch. Leeds **17** 1924 p. 169.

285.—Grensted, L. W. Further notes on the mollusca of the district North of Liverpool. Lancs. Ches. Nat. **15** 1923 pp. 159–162.

286.—Grensted, L. W. Note on the occurrence of *P. jenkinsi* at Hightown. Lancs. Ches. Nat. **15** 1923 p. 163.

287.—Grensted, L. W. *Vallonia pulchella* (seg.) at Hall Road. Lancs. Ches. Nat. **16** 1924 p. 136.

288.—Grieg, J. A. Pteropoda fra Nordatlanteren. Bergens Mus. Aarsb. No. 3 **1922-1923** 1924 pp. 1–10.

289.—Grier, N. M. Further studies in correlation of shape and station in freshwater mussels. Anat. Rec. Philadelphia **29** 1924 p. 127.

290.—Grier, N. M. On the naiades of Long Island, N.Y. Nautilus Boston Mass. **37** 1924 pp. 95–96.

291.—Grimpe, G. Teuthologische Mitteilungen ix–xi. Zool. Anz. Leipzig **58** 1924 pp. 320–330.

292.—Grimpe, G. and **Hoffmann,** H. Diagnosen neuer Athoracophoriden (Gastrop. Pulm). Zool. Anz. Leipzig **58** 1924 pp. 171–177.

293.—Gripp, K. Über eine untermiozäne Molluskenfauna von Itzehoe. Jahrb. Hamburg wiss. Anst. **1914** pp. 1–40 pls. i–iii. [? Original pagination.]

294.—Gürich, G. "Ammonitenbrut" von *Oppelia steraspis* nach Michael. Centralbl. Min. Stuttgart 1924 pp. 700–704.

295.—Gyngell, W. *H. aspersa* var. *major*. J. Conch. Leeds **17** 1924 p. 137.

296.—Haas, F. Beiträge zu einer Monographie der asiatischen Unioniden. Abh. Senckenb. Ges. Frankfurt-a-M. **38** 1924 pp. 129–203 pl. xv–xvi.

297.—Haas, F. Dr. Joaquin Gonzalez Hidalgo. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 54–55.

298.—Haas, F. Anatomische Untersuchungen an europäischen Najaden. i. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 66–82 pls. iv-v.

299.—Haas, F. Beitrag zur Molluskenfauna des unteren Ebrogebietes. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 137–160 pl. viii.

300.—Haas, F. Contribució a la malacofauna de la conca inferior del Ebre. Buttl. Inst. Catal. N. H. Barcelona Ser. 2 **4** 1924 pp. 48–63 pls. ii.

301.—Haas, F. Über *Vallonia costellata* Sandberger ihre Synonymie und Verbreitung. Senckenbergiana Frankfurt-a-M. **5** 1923 pp. 54–56.

302.—Hägg, R. Svenska kritbrachiopoder och krit mollusker i Hisnigers samling. Ark. Zool. Stockholm **16** 1924 No. 8 pp. 1–22.

303.—Hägg, R. Västra Sveriges nordligaste och högst belägna skalbank. Geol. För. Förh. Stockholm **45** 1923 pp. 436–440.

304.—Halaváts, G. A baltavári felsöpontusi korú molluszka-fauna. Magyar Kir. Földt. Evk. Budapest **24** 1923 pp. 395–407 pl. xiv.

305.—Hallez, ... Fossiles provenant de la partie supérieure de la craie exploitée dans la carrière de Bettignies a Binche. Ann. Soc. géol. Belgique **47** 1924 p. B 109.

306.—Hammarsten, O. and **Runnström,** J. Ein Beitrag zur Kenntniss der Ontogenie der Placophoren. Ark. Zool. Stockholm **16** 1924 No. 19 pp. 1–5.

307.—Hanna, G. D. *Succinea avara* Say, from the tar pits of California. Nautilus Boston Mass. **37** 1924 p. 106.

308.—Hanna, G. D. Expedition of the California Academy of Sciences to the gulf of California in 1921. Land and freshwater mollusks. Proc. Cal. Acad. Sci. San Francisco **12** 1923 No. 26 pp. 483–526 pls. vii–xi.

309.—Hanna, G. D. Rectifications of nomenclature. Proc. Cal. Acad. Sci. San Francisco **13** 1924 (No. 7) pp. 131–186.

310.—Hanna, G. D. Freshwater mollusks of Eagle Lake California. Proc. Cal. Acad. Sci. San Francisco **13** 1924 (No. 10) pp. 131–136 pl. i.

311.—Hanna, G. D. and **Gaylord,** E.G. Description of a new genus and species of freshwater gastropod mollusk (*Scalez petrolia*) from the Etchegoin Pliocene of California. Proc. Cal. Acad. Sci. San Francisco **13** 1924 (No. 9) pp. 147–149.

312.—Häntzschel, W. Die Einbettungslage von *Exogyra columba* im sächsischen Cenoman-Quader. Senckenbergiana Frankfurt-a-M. **6** 1924 pp. 223-225.

313.—Hayasaka, I. Some Permian fossils from the Kitakami Mountains. Japan J. Geol. Geogr. Tokio **2** 1923 pp. 107–116 pl. xv.

314.—Hayasaka, I. On the fauna of the anthracolithic limestone of Ômi-Mura in the Western part of Echigo. Sci. Rep. Tohohu Imp. Univ. Sendai Ser. 2 Geol. **8** 1924 pp. 1–83 pls. i–vii. [Mollusca at p. 57.]

315.—Haynes, T. H. Notes on the growth of molluscan pearls and shell and on *Pholadidea parva* causing blisters in *Haliotis*. Proc. Malac. Soc. London **16** 1924 pp. 112–121 pls. i–v.

316.—Heathcote, W. H. Non-marine mollusca of Port St. Mary, Isle of Man. J. Conch. Leeds **17** 1924 pp. 183–186.

317.—Hecht, S. Sensory equilibrium and dark adaptation in *Mya arenaria*. J. Gen. Physiol. Baltimore **1** 1919 pp. 545–558.

318.—Hecht, S. The effect of temperature on the latent period in the photic response of *Mya arenaria*. J. Gen. Physiol. Baltimore **1** 1919 pp. 667–685.

319.—Hecht, S. The photochemical nature of the photosensory process. J. Gen. Physiol. Baltimore **2** 1920 pp. 229–346.

320.—Hecht, S. Intensity and the process of photoreception. J. Gen. Physiol. Baltimore **2** 1920 pp. 337–347.

321.—Hecht, S. The visual discrimination of intensity and the Weber-Fechner law. J. Gen. Physiol. Baltimore **7** 1924 pp. 235–267.

322.—Hedley, C. The largest *Hippopus*. Rec. Austr. Mus. Sydney **14** 1923 p. 138.

323.—Hedley, C. Some notes on Australian land shells. Austral. Zool. Sydney Australia **3** 1924 pp. 215–221 pls. xxix–xxxii.

324.—Hedley, C. A bucket dredge. Nautilus Boston Mass. **37** 1924 pp. 118–119.

325.—Hedley, C. A supposed molluscan egg-nidus. Rec. Austr. Mus. Sydney **14** 1923 p. 139.

326.—Hedley, C. A revision of the Australian Pinnidae. Rec. Austr. Mus. Sydney **14** 1924 pp. 141–153 pls. xix–xxi.

327.—Hedley, C. Some Naticoids from Queensland. Rec. Austr. Mus. Sydney **14** 1924 pp. 154–162 pl. xxii.

328.—Heidermanns, C. Über den Muskelmagen der Süsswasserlungenschnecken. Zool. Jahrb. Jena Abt. 3 Allgem. Zool. **41** 1924 pp. 335–424 pls. xii–xv.

329.—Heilbrunn, L. V. The colloid chemistry of protoplasm. iii. The viscosity of protoplasm at various temperatures. Amer. J. Physiol. Baltimore **68** 1924 pp. 645–648.

330.—Henderson, J. The Post-glacial dispersal of mollusca in the Southern Rocky Mountains. Nautilus Boston Mass. **37** 1924 pp. 77–81.

331.—Henderson, J. Mollusca of Colorado, Utah, Montana, Idaho and Wyoming. Univ. Colo. Stud. Boulder **13** No. 2 1924 pp. 65–223 pls. i–iii.

332.—Hennig, E. Der mittlere Jura im Hinterlande von Daressalam (Deutsch-Ostafrika). Beiträge zur Geologie und Stratigraphie Deutsch-Ostafrikas iii. Monogr. Geol. Palaeont. Berlin (2) **2** 1924 pp. 1–131 pls. i–iv.

333.—Henson, P. P. Rugby mollusca. Rep. Rugby Sch. Nat. Hist. Soc. **56** 1922 pp. 19–28.

334.—Herwerden, M. A. van. L'influence de petites quantités d'écorce de surrénale sur la croissance et le pouvoir de reproduction. Arch. Néerl. Sci. Soc. Holl. Haarlem **9** 1924 pp. 381–384.

335.—Hesse, P. Die Anatomie einiger *Orcula*-Arten Arch. Molluskenkunde Frankfurt **56** 1924 pp. 1–13 pl. i.

336.—Hesse, P. Carlo Pollonera †. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 179–180.

337.—Hesse, P. *Cyclostoma elegans* bei Tübingen. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 213–214.

338.—Hesse, P. Kritische Fragmente. Arch. Molluskunde Frankfurt **56** pp. 226–230.

339.—Hewitt, H. D. Notes on some chalk sections in the district around Thetford, Norfolk. Proc. Geol. Ass. London **35** 1924 pp. 220–244.

340.—Hildebrand, E. Geologie und Morphologie der Umgebung von Westheim a-M. Karl Henn Freiburg i Br. **1924** pp. 1–79 pls.

341.—Hoffmann, H. Zur Anatomie und Systematik der Philomyciden. Jenaische Zs. Natw. **60** 1924 pp. 363–396.

Hoffmann, H. *vide* Grimpe, G.

342.—Hofmann, E. Friedrich Borcherding. 5 iv 1849 — † 4 iii 1924. Zum gedächtnis. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 57–66 pl. iii.

343.—Hofmann, E. Ein neuer Fund von gehäuften Schalenmissbildungen bei *Planorbis planorbis* L.; zugleich ein Beitrag zur Lettländischen Molluskenfauna. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 98–110.

344.—Hogben, L. T. The pigmentary effector system. A review of the physiology of colour response. Oliver and Boyd Edinburgh and London **1924** pp. 1–152. [Mollusca at p. 141.]

345.—Holtz, F., **Kutscher,** F. and **Thielmann,** F. Über das Vorkommen des Pflanzenalkaloids Trigonellin in der Tierwelt. Zs. Biol. München **81** 1924 pp. 57–60.

Holtz, F. *vide* Ackermann, D. and Kutscher, F.

346.—Hopkins, H. S. Respiration in the tissues of mollusks in relation to age. Anat. Rec. Philadelphia **29** 1924 p. 91.

347.—Hull, A. F. B. New Australian Polyplacophora and notes on the distribution of certain species. Austral. Zool. Sydney Australia **3** 1923 pp. 157–166 pls. xxiv–xxvi.

348.—Hull, A. F. B. New Australian Loricata and notes on the distribution of certain species. Austral. Zool. Sydney Australia **3** 1923 pp. 195–201 pls. xxvii–xxviii.

349.—Hull, A. F. B. The relation of the Loricates to the country rock. Proc. Linn. Soc. N. S. Wales Sydney **49** 1924 pp. ix–xvi pls. i–iii.

Hull, A. F. B. *vide* Ashby, E.

Hull, A. F. B. *vide* Iredale, T.

Hussey, R. C. *vide* Ehlers, G. M.

350.—Ihering, H. von. Los nautíloidos del terciario patagónico y chileno. An. Mus. Nac. Buenos Aires **31** 1923 pp. 470–474.

351.—Ihering, H. von. Die Kreide-Eocän Ablagerungen der Antarktis. Neues Jahrb. Min. Geol. Paläont. Stuttgart Beil Bd. **51** 1924 pp. 240–301.

352.—Iredale, T. Results from Roy Bell's molluscan collections. Proc. Linn. Soc. N. S. Wales Sydney **49** 1924 pp. 179–278 pls. xxxiii–xxxvi.

353.—Iredale, T. and **Hull,** A. F. B. A monograph of the Australian Loricates. Austral. Zool. Sydney Australia **3** 1923 pp. 186–194 pls. xxvi–xxvii **3** 1924 pp. 227–238 277–296 pls. xxxiii–xxxvii.

354.—Isager, K. and **Nielsen,** P. Bløddyr fra Ry- og Silkeborg-Egnen. [Freshwater mollusks in the environs of Ry and Silkeborg (the Himmelbjerg lakes).] Flora og Fauna Kjøbenhavn **1923** pp. 49–64 86–96. 4 pls.

355.—Iurinic, S. Bemerkungen zu der Nacktschnecken-Fauna Bulgariens. Trav. Soc. Bulg. Sci. Nat. Sophia No. 3 **1906** pp. 9–13. [With resumé in German.]

Ivanoff, E. *vide* Borissiak, A.

356.—Jackson, J. W. Notes on some "Pendleside" fossils. Naturalist London **1924** pp. 307–308.

357.—Jacot, A. Marine mollusca of the Bridgeport, Connecticut, Region. Nautilus Boston Mass. **38** 1924 pp. 49–51.

358.—Jaeckel, S. Die Molluskenfauna der Sperenberger Salzgewasser. Zs. Morph. Ökol. Berlin **3** 1924 pp. 81–149.

359.—Janisch, E. Zum Bau den quergestreiften und glatten Muskelsäulchen, nach Untersuchungen an *Bombas terrestris* und *Helix pomatia*. Anat. Anz. Jena **57** 1924 pp. 246–255.

360.—Jaworski, E. Die Trias-, Lias- und Dogger-Fauna der andinen Geosynklinale und ihre verwandtschaftlichen Beziehungen. Geol. Rdsch. Berlin **14** 1923 pp. 83–89.

361.—Jayet, A. L'albien supérieur de la perte du Rhône (Bellegarde, Ain). Arch. Sci. Phys. Genève (Suppl. C.R. soc. phys. hist. nat.) 5me Pér. **6** 1924 pp. 145–147.

362.—Jeannet, A. Le crétacé supérieur de la région du Drusberg, Ct. de Schwyz. Eclogae geol. Helvet. Lausanne **18** 1923 pp. 227–231.

363.—Jeannet, A. Quelques ammonites rares de l'Oxfordien du Jura neuchatelois. Eclogae geol. Helvet. Lausanne **18** 1923 pp. 361–366.

364.—Jekelius, E. Die Palaeontologie der Süsswassermollusken. Bul. Acad. Roumaine Bucharest **8** 1923 pp. 89–102.

365.—Jekelius, E. A brassói hegyek mezozoos faunája. Magyar Kir. Foldt. Budapest **24** 1916 pp. 1 [220]–98 [314] pls. iv–vi. [Mollusca at p. 11 [227].]

366.—Jessen, K. En undersøisk mose i Rungsted Havn og de senglaciale niveauforandringer i Øresund. [With English summary.] A submerged peat-bog in the harbour of Rungsted and changes of sea-level in the Sound in the late-glacial period. Medd. Geol. Kjöbenhavn **6** 1923 pp. 1–18.

367.—Johansen, F. A biological excursion to Anticosti Island. Canad. Field Nat. Ottawa **38** 1924 pp. 161–164.

368.—Johns, E. W. Some food reactions of snails. Proc. Iowa Acad. Sci. Des Moines **30** 1923 pp. 181–184.

369.—J[ohnson], C. W. The purple dye of mollusks. Nautilus Boston Mass. **38** 1924 p. 65.

Joleaud, L. *vide* Bertrand, L.

370.—Jordan, E. K. Quaternary and recent molluscan faunas of the West Coast of Lower California. Bul. S. Cal. Acad. Sci. Los Angeles **23** 1924 pp. 145–156.

371.—Jourdy, E. Histoire naturelle des exogyres. Ann. paléont. Paris **13** 1924 pp. 1–104 pls. i–xi.

372.—Juday, C. Summary of quantitative investigations on Green Lake, Wisconsin. Intern. Rev. Hydrobiol. Leipzig **12** 1924 pp. 2–12.

373.—Kennard, [A. S.]. French and German editions of Geoffroy. Proc. Malac. Soc. London **16** 1924 p. 2.

374.—Kennard, [A. S.]. *Helix nemoralis*, *H. hortensis*, and very large *Arianta arbustorum* from the flint mines at Patching, near Worthing. Proc. Malac. Soc. London **16** 1924 p. 2.

375.—Kennard, A. S. Presidential address. The Pleistocene non-marine mollusca of England. Proc. Malac. Soc. **16** 1924 pp. 84–97.

376.—Kennard, A. S. and **Woodward,** B. B. in **Treacher,** L. Excursion to Marlow, Saturday, July 14th, 1923. Report on the non-marine mollusca. Proc. Geol. Ass. London **35** 1924 pp. 150–151.

377.—Kennard, A. S. and **Woodward,** B. B. Nomenclatorial notes relating to British non-marine mollusca. ii. Proc. Malac. Soc. London **16** 1924 pp. 7–14.

378.—Kennard, A. S. and **Woodward,** B. B. Nomenclatorial notes relating to British non-marine mollusca. iii. With descriptions of *Theodoxus cantianus*, n. sp. and *Unio cantianus*, n. sp. Proc. Malac. Soc. London **16** 1924 pp. 125–137.

379.—Kilian, W. and **Blanchet,** F. Sur les ammonites recueillies par le "Pourquoi-Pas ?" Trav. Lab. geol. Grenoble **13** 1924 pp. 73–75.

380.—Kippiani, N. M. Le néogene du sud-ouest de la Gourie. Bul. Acad. sci. Russ. Petrograd Ser. 2 **11** 1917 pp. 653–655. [In Russian.]

381.—Kirchner, H. S. Ein mitteldevonischer *Euomphalus* mit mehrfacher Abschnürung (*Euomphalus discoidalis* n. sp.). Verh. physik. Ges. Wurzburg **47** 1922 pp. 43–46.

382.—Klett, B. Die Konchylienfauna diluvialer und alluvialer Ablagerungen in der Umgebung von Mühlhausen i. Th. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 185–199.

383.—Koehler, R. Les echinodermes des mers d'Europe. Paris Librairie Octave Doin, Gaston Doin Editeur **1** 1924 pp. 1–362 9 pls. [Mollusca at p. 50.]

384.—Kollmann, M. Note sur l'évolution de la glande lymphoïde et des leucocytes des céphalopodes. C.R. soc. biol. Paris **91** 1924 pp. 1317–1319.

385.—König, H. Zur Kenntnis des untern Trochitenkalkes im nördlichen Kraichgau. Sitz.Ber. Ak. Wiss. Heidelberg Abh. **13** 1920 pp. 3–48 1 pl.

386.—Krause, P. G. Über *Fusus trilineatus* Sow. und *Fusus multisulcatus* Nyst. Zs. D. geol. Ges. Berlin B Monatsb. **75** 1924 pp. 188–189.

387.—Krumbeck, L. Ein neuer *Aucella*-Fund (*Aucella bronni*[Rouill.] Lah. var.) im Frakenjura. Centralbl. Min. Stuttgart **1924** pp. 26–31.

388.—Krumbeck, L. xxiii. Die Brachiopoden, Lamellibranchiaten und Gastropoden der Trias von Timor. ii. Palaeont. von Timor Lief. **13** 1924 pp. 1–275 [143–417] pls. clxxix–cxcvi (i–xx).

389.—Kugler, H. G. Das Eozän profil von Soldado Rock bei Trinidad. Eclogae geol. Helvet. Lausanne **18** 1923 pp. 253–259.

Kutscher, F. *vide* Ackermann, D. and Holtz, F.

Kutscher, F. *vide* Holtz, F. and Thielmann, F.

390.—Labbé, A. Introduction à l'étude des milieux marins hypercalins. Arch. zool. Paris **62** 1924 pp. 401–568 pl. xvii.

391.—Labbé, A. Les Opistobranches du Croisic. Bul. soc. sci. nat. Nantes Ser. 4 **1** 1921 pp. viii–x.

392.—Labbé, A. Description sommaire de cinq nouvelles espèces d'Éolidiens trouvées à la station du Croisic. Bul. soc. sci. nat. Nantes Ser. 4 **3** 1923 pp. 7–10.

393.—Labbé, A. Note préliminaire sur cinq espèces nouvelles d'éolidiens de la station du Croisic. Bul. soc. zool. Paris **48** 1923 pp. 265–268.

394.—Lamy, E. Notes sur les espèces Lamarckiennes d'*Ostrea*. Bul. Mus. Paris **1924** pp. 92–99 151–158 231–238 316–320.

395.—Lamy, E. Note sur une concrétion perlière observée chez une moule verte d'Afrique *Mytilus africanus* Chemnitz. Bul. soc. sci. nat. Maroc. Rabat **3** 1923 pp. 117–119 pl. i.

396.—Lamy, E. A. Bavay. J. conchyliol. Paris **68** 1924 pp. 172–179.

397.—Lamy, E. Révision des Saxicavidae vivants du Muséum National d'Histoire Naturelle de Paris. J. conchyliol. Paris **68** 1924 pp. 218–248.

398.—Lang, H. *Ampullarius* and *Rostrhamus* at Georgetown, British Guiana. Nautilus Boston Mass. **37** 1924 pp. 73–77 pl. iv.

399.—Langeron, M. Mollusques d'eau douce pêchés en Crète. Ann. Parasitol. Paris **1** 1923 p. 109.

400.—Lavier, G. Mollusques d'eau douce recueillis au Maroc. Ann. Parasitol. Paris **1** 1923 pp. 202–203.

Lebour, M. V. *vide* Atkins, W. R. G.

401.—Lee, G. W. On the faunal sequence of the carboniferous rocks met in the Roddymoor Boring, Co. Durham. Summ. Progr. Geol. Surv. for 1923 London Appendix **1** 1924 pp. 146–149.

402.—Leenhardt, H. Sur la présence d'un muscle pédieux chez les ostréides. Bul. soc. zool. Paris **48** 1923 pp. 379–380.

403.—Léger, L. Sur la valeur nutritive de l'escargot. C.R. Acad. Sci. Paris **179** 1924 pp. 1622–1625.

404.—Lehner, L. Die Gliederung der fränkischen albüberdeckenden Kreide. Centralbl. Min. Stuttgart **1924** pp. 176–181.

405.—Leuthardt, F. Die Fossilien des Burgeinschnittes bei Liestal. Eclogae Geol. Helvet. Lausanne **18** 1923 pp. 300–303.

406.—Leuthardt, F. *Ancyloceras* im Basler Jura. Eclogae Geol. Helvet. Lausanne **18** 1923 p. 303.

407.—Lewinski, J. Monographie géologique et paléontologique du Bononien de la Pologne. Mém. soc. géol. Paris **24** 1923 pp. 5–56 pls. i–viii **25** 1923 pp. 57–108 pls. ix–xi. [Mollusca at p. 52.]

408.—Lewy, F. H. Über die Einwirkung von Calcium und Kalium auf Tonus und Bewegung bei Aplysien. Arch. ges. Physiol. Berlin **203** 1924 pp. 357–364.

409.—Lindholm, W. [A.]. On a new form of *Pyramidula rupestris* Drap. (Gastropoda Pulmonata) from Western China. Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** 1922 pp. 255–256.

410.—Lindholm, W. A. Description of two *Bulimini* (Gastropoda Pulmonata) from Russian Central Asia. Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** 1922 pp. 273–275.

411.—Lindholm, W. A. On some mollusks from Sumatra and the Malay Peninsula. Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** 1922 pp. 280–282.

412.—Lindholm, W. A. Miscellaneous notes on palaearctic land and freshwater mollusca. Ann. Mus. Zool. Acad. sci. russ. Petrograd **23** 1922 pp. 304–320.

413.—Lindholm, W. A. Beschreibung einiger kaukasischer Landschnecken (Gastropoda Pulmonata). Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** 1922 pp. 355–361.

414.—Lindholm, W. A. Die erste echte *Hyalinia* (Gastropoda Pulmonata) aus Transcaspien. Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** 1922 pp. 365–366.

415.—Lindholm, W. A. Die kaukasischen Arten der Guttung *Poiretia* Fischer. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 90–95 181.

416.—Lindholm, W. A. Collectanea baicalica i. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 217–225.

417.—Lindholm, W. A. Ueber Mollusken aus dem Delta-Gebiete des Amu-Darja. Bul. Acad. Sci. Russ. St. Petersburg **8** 1914 p. 186. [In Russian.]

418.—Lindholm, W. A. Einige neue Gastropoden aus dem Baikalsee. C. R. Acad. Sci. Russie Petrograd **1924** pp. 22–25.

419.—Lindholm, W. A. A revised systematic list of the genera of the Clausiliidae, recent and fossil, with their subdivisions, synonymy and types. Proc. Malac. Soc. London **16** 1924 pp. 53–80.

420.—Liouville, J. Sur quelques documents de la faune marine du Maroc nouvellement parvenus a l'institut scientifique. Bul. soc. sci. nat. Maroc. Rabat **4** 1924 pp. 16–21.

421.—Löhner, L. Zur Kenntnis der oligodynamischen Metall-Giftwirkungen auf die lebendige Substanz. ii. Mitteilung. Über den Einfluss der Wasserkupferung auf Hämocyanintiere. Arch. ges. Physiol. Berlin **203** 1924 pp. 524–532.

422.—Longstaff, J. Descriptions of Gasteropoda, chiefly in Mrs. Robert Gray's collection, from the Ordovician and Lower Silurian of Girvan. Q. J. Geol. Soc. London **80** 1924 pp. 408–446 pls. xxxi–xxxviii.

423.—Lörenthey, I. Adatok északi Albánia Eocén képzödményének kifejlödéséhez és faunájához. Magyar Kir. Foldt. Budapest **25** 1917 pp. 1–21 pls. i–ii.

424.—Løyning, P. Nudibranchfaunaen i Drøbaksundet i. Fam. Aeolididae. Skr. Vid. selsk Kristiania **1923** No. 6 pp. 1–103 pls. i–iv. [English summary at p. 90.]

425.—MacFarland, F. M. Expedition of the California Academy of Sciences to the Gulf of California in 1921. Proc. Cal. Acad. Sci. San Francisco **13** 1924 (No. 25) pp. 389–420 pls. x–xii.

426.—McHargue, J. S. The significance of the occurrence of copper, manganese and zinc in shell-fish. Science New York N.Y. **60** 1924 p. 530.

427.—Macintyre, D. The curlew in Kintyre. J. Conch. Leeds **17** 1924 p. 155.

428.—McLearn, F. H. Palaeontology of the Silurian rocks of Arisaig, Nova Scotia. Geol. Surv. Canada Ottawa **137** 1924 pp. 1–180 pls. i–xxx. [Mollusca at pp. 37 91.]

429.—Makiyama, J. Some Pliocene mollusks from Maiko, near Kobe. Japan J. Geol. Geogr. Tokio **2** 1923 pp. 19–26 pl. iv.

430.—Marcus, E. Zur Frage der Tierverbreitung und pazifischen Landverbindung. Ergebn. Zool. Jena **6** 1924 pp. 1–26. [Mollusca at p. 15.]

431.—Mark, E. L. Marine borers in Bermuda. Proc. Amer. Acad. Arts. Sci. Boston No. 11 **59** 1924 pp. 259–276 pls. i–iv.

432.—Marshall, P. Two fossil cephalopods from North Canterbury. Trans. Proc. N. Zeal. Inst. Wellington **55** 1924 pp. 615–616 pls. lxiii–lxiv.

433.—Marshall, P. and **Murdoch,** R. The tertiary beds of the Wanganui—South Taranaki coast. Trans. Proc. N. Zeal. Inst. Wellington **55** 1924 pp. 155–156.

434.—Marshall, W. B. New species of mollusks of the genus *Chilina*. Proc. U. S. Nat. Mus. Washington No. 2550 **66** 1924 pp. 1–5 pl. i.

435.—Marshall, W. B. New Uruguayan mollusks of the genus *Corbicula*. Proc. U. S. Nat. Mus. Washington No. 2552 **66** 1924 pp. 1–12 pls. i–ii.

436.—Marwick, J. Notes on a molluscan collection of supposed Waiarekan age. N. Zealand J. Sci. Tech. Wellington **6** 1924 .p 280.

437.—Marwick, J. *Zealeda*, and *Barytellina*, new fossil molluscan genera from New Zealand. Proc. Malac. Soc. London **16** 1924 pp. 25–26.

438.—Marwick, J. The Struthiolariidae. Trans. Proc. N. Zeal. Inst. Wellington **55** 1924 pp. 161–190 pls. xi–xv.

439.—Marwick, J. Palaeontological notes on some Pliocene mollusca from Hawkes Bay. Trans. Proc. N. Zeal. Inst. Wellington **55** 1924 pp. 191–201 pls. xvi–xvii.

440.—Marwick, J. The tertiary and recent Naticidae and Naricidae of New Zealand. Trans. Proc. N. Zeal. Inst. Wellington **55** 1924 pp. 545–579 pls. lv–lx.

Mason, F. A. *vide* Pearsall, W. H.

441.—Massy, A. L. Note on a new cephalopod, *Cirroteuthis* (*Cirroteuthopsis*) *massyae*, Grimpe. Ann. Mag. Nat. Hist. London Ser. 9 **13** pp. 127–130.

442.—May, W. L. Mollusca of King Island. With description of five new species. Papers and Proc. R. Soc. Tasmania Hobart **1923** 1924 pp. 47–55 pl. vii.

443.—Maynard, C. J. Descriptions of some species of the family Cerionidae. Records of Walks and Talks with Nature. C. J. Maynard West Newton Mass. Appendix to **5** 1912 pp. 177–200 (pp. 187–199 issued February 9th 1913).

444.—Maynard, C. J. A species of land shell of the family Cerionidae redescribed. Records of Walks and Talks with Nature. C. J. Maynard West Newton Mass. **6** 1912 pp. 177–179.

445.—Maynard, C. J. Contributions to the history of the Cerionidae with descriptions of many new species. . . . . Records of Walks and Talks with Nature. C. J. Maynard West Newton Mass. Appendix to **10** 1924 pp. 155–170 pls. xxxviii–xxxix.

446.—Maynard, C. J. and **Clapp,** N. A. Descriptions of new Strophias. Walks and Talks with Nature. C. J. Maynard West Newton Mass. **6** 1912 pp. 180–182.

447.—Mazzarelli, G. Note sulla biologia dell' ostrica (*Ostrea edulis* L.) i. Nascita delle larve e durata del periodo larvale. Boll. soc. nat. Napoli **34** 1923 pp. 151–159.

448.—Mazzarelli, G. Note sulla biologia dell' ostrica (*Ostrea edulis* L.). ii. La sorte del "fregolo bianco" nelle ostriche madri tenute in piccoli acquari. Bol. soc. nat. Napoli **34** 1923 pp. 234–237.

449.—Meek, A. Estuarine plankton. Rep. Dove Mar. Lab. Cullercoats N.S. **12** 1923 pp. 78–95. [Mollusca at p. 81].

450.—Meek, A. Mollusca. Rep. Dove Mar. Lab. Cullercoats N.S. **12** 1923 pp. 95–97.

451.—Meek, A. Mollusca, 1923. Rep. Dove Mar. Lab. Cullercoats N.S. **13** 1924 pp. 60–63.

452.—Meer Mohr, J. C. van der. Bemerkung über die Verwendung von *Cypraea tigris* L. zum Glätten von Leinwand auf Java. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 211–212.

453.—Melvill, J. C. Obituary notice: Lieut.-Col. H. H. Godwin-Austen, F.R.S. J. Conch. Leeds **17** 1924 pp. 141-146.

454.—Melvill, J. C. and **Peile,** A. J. On *Cereobullia*, n. gen., for *Bullia ceroplasta*, Melvill. Proc. Malac. Soc. London **16** 1924 pp. 138–139.

455.—Miles, H. W. Observations on the hatching of the field slug, *Agriolimax agrestis* Linn. Scot. Nat. Edinburgh No. **149** 1924 pp. 131–134.

456.—Miller, H. M. A survey of the marine gastropods from the vicinity of San Juan Island, Puget Sound, with respect to larval trematode infestation. Anat. Rec. Philadelphia **29** 1924 p. 123.

457.—Miller, R. C. The boring mechanism of *Teredo*. Univ. Cal. Pub. Zool. Berkeley **26** 1924 No. 4 pp. 41–80 pls. iii–vi.

458.—Miller, R. C. Wood-boring mollusks from the Hawaiian, Samoan and Philippine Islands. Univ. Cal. Pub. Zool. Berkeley **26** 1924 No. 7 pp. 145–158 pls. viii–xi.

459.—Mitchell, J. Eleven new species of *Aviculopecten* from Carboniferous rocks, Myall Lakes, N.S.W. Proc. Linn. Soc. N. S. Wales Sydney **49** 1924 pp. 468–474 pls. xlix–lii.

460.—Modell, H. Neue Wege der Najadenforschung. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 17–54 180.

461.—Moore, A. R. The selective action of Nicotine on the central nervous system of the squid, *Loligo pealii*. J. Gen. Physiol. Baltimore **1** 1919 pp. 505–508.

462.—Moos, A. Neue *Nautilus*-Schnäbel aus dem Dogger und Malm Schwabens. Zs. D. geol. ges. Berlin **76** 1924 pp. 192–199.

463.—Morningstar, H. Catalogue of type fossils in the Geological Museum at the Ohio State University. Ohio J. Sci. Columbus **24** 1924 pp. 31–64.

464.—Moros, F. A. Historia de la *Pupa kobelti* Hidalgo y reseña de sus variaciones. Bol. Soc. Iber. Zaragoza **22** 1923 pp. 105–111.

465.—Moros, F. A. El Doctor Hidalgo y sus publicaciones malacológicas. Rev. Acad. Ci. Madrid **21** 1923 pp. 58–120.

466.—Mortensen, T. The Danish expedition to the Kei Islands, 1922. Videns. Medd. nat. For. Kjöbenhavn **76** 1923 pp. 55–99 pls. i–iii.

467.—Müller, W. Die Fauna der Frasne-Stufe bei Almaden in der Sierra Morena. Senckenbergiana Frankfurt-a-M. **6** 1924 pp. 226–228.

468.—Murdoch, R. Some tertiary mollusca, with descriptions of new species. Trans. Proc. N. Zeal. Inst. Wellington **55** 1924 pp. 157–160 pls. viii–x.

Murdoch, R. *vide* Marshall, P.

469.—Murray, J. and **Chumley,** J. The deep-sea deposits of the Atlantic Ocean. Trans. R. Soc. Edinburgh **54** 1924 pp. i–ix 1–252. [Mollusca at p. 248.]

470.—Nackij, A. D. Les gasteropodes des argilles à septaria de Mangyšlak. Bul. Acad. sci. Russe Petrograd **9** 1915 p. 75. [In Russian.]

471.—Naef, A. Studien zur generellen Morphologie der Mollusken. 3. Teil: Die typischen Beziehungen der Weichtierklassen untereinander und das Verhältnis ihrer Urformen zu anderen Cölomaten. Ergebn. Zool. Jena **6** 1924 pp. 27–124.

472.—Nagao, T. Occurrence of *Orthaulax* in the Palaeogene of Japan. Japan J. Geol. Geogr. Tokio **3** 1924 pp. 13–18 pl. i.

473.—Nalivkin, W. and **Akimov,** M. La faune du Jura du Donetz. iii. Gastropoda. Mém. Com. Geol. Petrograd **136** 1917 pp. 1–46 pls. i–iii. [In Russian with French resumé at p. 45.]

474.—Nasonov, N. V. Collections zoologiques présentées au Musée Zoologique de l'Academie par les expeditions "Tajmyr" et du "Vajgač" pendant les années 1910–1915. Bul. Acad. Sci. Russ. Petrograd **10** 1916 pp. 1493–1504. [Title in Russian.]

475.—Naumann, E. Zur Kenntnis der alluvialen und jungdiluvialen Schotter im mittleren Weser- und Saaletal. Zs. D. geol. ges. Berlin B. Monatsb. **76** 1924 pp. 89–95.

476.—Neaverson, E. The attachment of the ammonite-siphuncle. Proc. Liverpool Geol. Soc. **14** 1924 pp. 65–77 pl. ii.

477.—Nelson, T. C. Metamorphosis to the dissoconch stage without attachment in the veligers of *Ostrea* and of *Mytilus*. Anat. Rec. Philadelphia **29** 1924 p. 97.

478.—Nelson, T. C. The attachment of oyster larvae. Biol. Bull. Wood's Hole Mass. **46** 1924 pp. 143–151.

479.—Newton, R. B. On some marine cretaceous mollusca from Trinidad. Proc. Malac. Soc. London **16** 1924 pp. 140–146 pls. vi–vii.

480.—Nicodim, E. Asupra hepatopancreasuli dela moluşte. Anal. Acad. Române Bucharest **35** 1913 pp. 117–119.

481.—Nicodim, E. Contributiuni la studiul anatomiei, istologiei şi fiziologiei hepato-pancreasului della moluşte. Publ. Adamachi Ac. Română Bucuresci **41** 1913 pp. 1–39 pls. i–ii.

Nielsen, P. *vide* Isager, K.

482.—Nikitin, S. N. Cephalopoden des moskauer Jura. Mém. Com. géol. Petrograd **70** 1916 pp. 1–61 pls. i–ii. [In Russian with German resumé at p. 35.]

483.—Nowak, J. O dwudzielnych zatokach amonitów górnokredowych i ich znaczeniu dla systematyki. Über die bifiden Loben der oberkretazischen Ammoniten und ihre Bedeutung für die Systematik. Bul. Intern. Acad. Kraków **1915** B pp. 1–13. [In German.]

484.—Nowak, J. Cephalopoden der mittleren kreide Podoliens. Bul. Intern. Acad. Kraków **1917** No. 1–3 A pp. 49–58.

485.—Nowak, J. Die Verbreitung der Cephalopoden im polnischen Senon. Bul. Intern. Acad. Kraków **1917** Nos. 4–6 A 7 pp. 129–152.

486.—Nuttall, G. H. F. Symbiosis in animals and plants. Rep. Brit. Ass. London **91** 1924 pp. 197–214.

487.—Nylander, O. O. A visit to Sweden. Nautilus Boston Mass. **38** 1924 pp. 1–4.

488.—Odhner, N. H. *Truncatellina sundleri* n. sp., eine neue Schnecke aus dem südlichen Schweden. Ark. Zool. Stockholm **16** 1924 No. 29 pp. 1–4.

489.—Odhner, N. H. Report of the scientific results of the Norwegian expedition to Novaya Zemlya, 1921. No. 6. Mollusca *Pisidium conventus* Clessin (*P. clessini* Surbeck, *partim*). Results Norwegian Exped. Nova Zemlya 1921 **1924** No. 6 pp. 1–6 pl. i.

490.—O'Donoghue, C. H. Report on Opisthobranchiata from the Abrolhos Islands, Western Australia, with description of a new parasitic Copepod. J. Linn. Soc. Zool. London **35** 1924 pp. 521–579 pls. xxvii–xxx.

491.—Økland, F. Bidrag til undersökelsen av landsneglenes utbredelse i Norrland. Fauna och Flora Uppsala **1924** pp. 161–167.

492.—Økland, F. Some new variations of slugs. J. Conch. Leeds **17** 1924 pp. 138–140.

493.—Økland, F. Arionidae of Norway. Skr. Vid. selsk. Kristiania **1923** No. 5 pp. 1–62 pl. i.

494.—Oldham, [C.]. Print of *Helix aspersa* showing darts, from Shaw and Nodder's "Naturalist's Miscellany," vol. i pl. xxx. Proc. Malac. Soc. London **16** 1924 p. 2.

495.—Oldroyd, I. S. Description of a new fossil species of a clam of the genus (*Crassatellites*). Bul. S. Cal. Acad. Sci. Los Angeles **23** 1924 p. 10.

496.—Oldroyd, I. S. Marine shells of Puget Sound and vicinity. Publ. Puget Sound Biol. St. Seattle 271 **4** 1924 pp. 1 pls. i–xlix.

497.—Oldroyd, T. S. The fossils of the lower San Pedro fauna of the Nob Hill Cut, San Pedro, California. Proc. U. S. Nat. Mus. Washington **65** 1924 pp. 1–39 pls. i–ii.

498.—Olson, A. .A Notes on marine mollusks from Peru and Ecuador. Nautilus Boston Mass. **37** 1924 pp. 120–130.

499.—O'Mahony, E. Dublin mollusca. Irish Nat. Dublin **33** 1924 p. 8.

O'Neill, J. J. *vide* Buckman, S. S.

O'Neill, J. J. *vide* Dall, W. H.

500.—Oostingh, C. H. Bemerkungen über einige fossile und rezente *Arca*-Arten des indischen Archipels. Senckenbergiana Frankfurt-a-M. **5** 1924 pp. 107–114.

501.—Oppenheim, P. Über das Verhältnis von *Fusus trilineatus* Sow. zu *Fusus multisulcatus* Nyst. Zs. D. géol. ges. Berlin B Monastb. **75** 1924 pp. 190–198.

502.—Ortmann, A. E. Distributional features of naiades in tributaries of Lake Erie. Amer. Midl. Nat. Notre Dame Indiana **9** 1924 pp. 101–117.

503.—Ortmann, A. E. Notes on the anatomy and taxonomy of certain Lampsilinae from the Gulf Drainage. Nautilus Boston Mass. **37** 1924 pp. 99–105 137–144.

504.—Ortmann, A. E. Mussel shoals. Science New York **60** 1924 pp. 565–566.

505.—Orton, J. H. Sex change and breeding in the native oyster *O. edulis*. Nature London **114** 1924 pp. 191–192.

506.—Orton, J. H. On early sexual maturity in the molluscs, *Syndosmya alba* and *Cardium fasciatum*. Nature London **114** 1924 p. 244.

507.—Orton, J. H. English enemies of the American slipper-limpet, *Crepidula fornicata*. Nature London **114** 1924 p. 312.

508.—Otterstrøm, C. V. Vandremuslingen (*Dreissensia polymorpha* Pall.) i Esrom Sø. Flora og Fauna Kjöbenhavn **1924** pp. 33–34.

509.—Øyen, P. A. Romeriksletten, Norges største terrasse. Naturen Bergen **48** 1924 pp. 16–37.

510.—Packard, E. L. New species from the Cretaceous of the Santa Ana Mountains, California. Univ. Cal. Publ. Geol. Berkeley **13** 1922 pp. 413–462 pls. xxiv–xxxviii.

511.—Packard, E. L. An aberrant oyster from the Oregon Eocene. Univ. Oregon Publ. Eugene Or. **2** 1923 pp. [1]–[14] pls. i–iv.

512.—Pallary, P. Note sur quelques mollusques d'un dépôt pléistocène de Colomb-Béchar. Bul. Soc. hist. nat. Alger **15** 1924 pp. 111–113.

513.—Pallary, P. Révision des *Melanopsis* de l'Espagne. Bul. Soc. hist. nat. Alger **15** 1924 pp. 240–255 pl. xv.

514.—Pallary, P. Description d'une variété nouvelle de *Cardium tuberculatum* Linné. Bul. Soc. hist. nat. Alger **15** 1924 p. 324.

515.—Pallary, P. Descriptions de trois mollusques nouveaux de Maroc. Bul. soc. sci. nat. Maroc Rabat: Paris **3** 1923 pp. 78–79.

516.—Pallary, P. Exploration scientifique du Maroc. Mission Zoologique. Malacologie (1912). Expl. sci. Maroc Rabat: Paris **2** 1920 pp. 1–107 map and pl.

517.—Pallary, P. C. Pollonera. J. conchyliol. Paris **68** 1924 pp. 170–172.

518.—Pallary, P. Faune malacologique du Sinai. J. conchyliol. Paris **68** 1924 pp. 181–217 pls. x–xii.

519.—Pallary, P. Supplément à la faune malacologique terrestre et fluviatile de l'Egypte. Mem. Inst. Egypt Cairo **7** 1924 pp. 1–61 pls. i–iv.

520.—Palmer, D. B. K. A fauna of the middle Eocene shales near Vacaville, California. Univ. Cal. Pub. Geol. Berkeley **14** 1923 No. 8 pp. 289–318 pls. lii–lvii.

521.—Palvarino, G. L. Ammoniti del Toarciano del Monte Subasio. Boll. Soc. geol. ital. Roma **42** 1924 pp. 58–68.

522.—Parona, C. F. Fauna del Neocretacico della Tripolitania. Molluschi. Parte ii.—Lamellibranchi. Mem. Serv. alla Descr. Carta geol. ital. Roma **8** pt. 4 1923 pp. 1–52 pls. i–xii.

523.—Pearsall, W. H. and **Mason,** F. A. Yorkshire naturalists at Scarthingwell Park. Naturalist London **1924** No. 814 pp. 343–345. [Moll. at p. 345.]

524.—Pearsall, W. H. and **Mason,** F. A. Yorkshire naturalists in Teesdale. Naturalist London **1924** No. 814 pp. 346–350. [Moll. at p. 348.]

525.—Pearson, J. Statistics dealing with the growth, rate, etc., of *Placuna placenta*. Bul. Ceylon Fish. **1** 1922 pp. 13–64.

526.—Peile, [A. J.]. Slides of radulae of spotted and unspotted varieties of the British *Trivia* from Guernsey. Proc. Malac. Soc. London **16** 1924 p. i.

527.—Peile, A. J. Notes on the genus *Poecilozonites*, with descriptions of new species. Proc. Malac. Soc. London **16** 1924 pp. 16–21.

528.—Peile, A. J. A new species of *Sigapatella* (*S. terraenovae*). Proc. Malac. Soc. London **16** 1924 pp. 21–23.

Peile, A. J. *vide* Melvill, J. C.

529.—Penndorf, H. Zur Gliederung der Ceratitenschichten in Niederhessen. Centralbl. Min. Stuttgart **1924** pp. 50–53.

530.—Pereira de Sousa, F. L. Sur un nouveau genre de goniatite : *Lusitanoceras*. Bul. Soc. géol. Paris **23** 1924 p. 304 pl. ix.

531.—Petit, G. Extraits des Procés-verbaux des séances de la societé. Agriculture. Bul. soc. nat.-acclim. Paris **69** 1922 p. 197.

532.—Petković, V. K. L'etage aptien dans la Serbie orientale. Ann. Geol. Balkan Belgrade **7** 1923 pp. 57–79. [In Serb with French resumé at p. 78.]

533.—Petrbok, J. Ein Beitrag zur Kenntnis der pleistozänen Mollusken aus dem Banat. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 172–179.

Peyrot *vide* Cossmann, [M.].

534.—Pierantoni, U. Nuove osservazioni su luminescenza e simbiosi : iii. L'organo luminoso di *Heteroteuthis dispar*. Atti Acc. Lincei Roma **33** Sem. ii 1924 pp. 61–65.

535.—Pierantoni, U. A proposito delle teorie sulla luminescenza batterica e sulle simbiosi fisiologiche. Boll. soc. nat. Napoli **32** 1920 pp. 43–40.

536.—Pierantoni, U. Sulla biofotogenesi simbiotica. (Un'ultima parola in risposta a S. Mortara.) Boll. soc, nat. Napoli **34** 1923 pp. 307–309.

537.—Pilsbry, H. A. Ou *Triodopsis harfordiana* W. G. B. Nautilus Boston Mass. **37** 1924 pp. 133–135.

538.—Pilsbry, H. A. The affinities of *Balea africana* Melvill and Ponsonby. Nautilus Boston Mass. **38** 1924 p. 6.

539.—Pilsbry, H. A. Californian helices. Nautilus Boston Mass. **38** 1924 pp. 54–55.

540.—Pilsbry, H. A. Colorado land snails. Nautilus Boston Mass. **38** 1924 p. 65.

541.—Pilsbry, H. A. Manual of conchology : structural and systematic. With illustrations of the species (second series : Pulmonata). Philadelphia (Conchological Dept.). Acad. Nat. Sci. [Vol. **27**] pt. 107 pp. 129–176 pls. xii–xviii.

542.—Pilsbry, H. A. Recent and fossil Bermudan snails of the genus *Poecilozonites*. Proc. Acad. Nat. Sci. Philadelphia **76** 1924 pp. 1–9.

543.—Pilsbry, H. A. On some Japanese land and fresh water mollusks. Proc. Acad. Nat. Sci. Philadelphia **76** 1924 pp. 11–13.

544.—Pilsbry, H. A. Land and fresh-water mollusks from Mindanao. Proc. Acad. Nat. Sci. Philadelphia **76** 1924 pp. 13–17 pl. i.

545.—Pilsbry, H. A. South American land and fresh-water mollusks : notes and descriptions.. Proc. Acad. Nat. Sci. Philadelphia **76** 1924 pp. 49–66 pl. iv.

546.—Pilsbry, H. A. Some Allegheniean forms of the land-snail genus *Gonyodiscus*. Proc. Acad. Nat. Sci. Philadelphia **76** 1924 pp. 417–421.

547.—Pilsbry, H. A. and **Vanatta, E. G.** *Polygyra appressa linguifera* and *sancta georgiensis*. Nautilus Boston Mass. **38** 1924 pp. 4–6.

Pilz, G. F. *vide* Crozier, W. J.

548.—Plenk, H. Die Muskelfasern der Schnecken. Zugleich eine kritische Studie über die sogenannte Schrägstreifung. Zs. wiss. zool. Leipzig **122** 1924 pp. 1–78 pls. i ii.

549.—Poliński, W. Sur un nouveau sous-genre et deux nouvelles espèces de Clausiliidés sud-américaines. Bul. Acad. Pol. Sci. Lett. Ser. B Cracovie **1924** pp. 739–744 pl. xlix. [In French.]

550.—Poliński, W. Mięczaki z iłów ludwinowskich.—Quartäre Mollusken aus den Tonen von Ludwinów bei Krakau. Bul. Intern. Acad. Kraków **1914** B pp. 716–730. [In German.]

551.—Poliński, W. Nowe podrodzaje i gatunki świdrzyków (Clausiliidae) peruwianskich.—Neue Clausiliiden aus Peru. Bul. Intern. Acad. Kraków **1921** B pp. 121–142. [In German.]

552.—Poliński, W. Anatomiczno-systematyczne i zoogeograficzne studja nad Helicidami Polski.—Anatomisch-systematische und zoogeographische Studien über die Heliciden Polens. Bul. Intern. Acad. Kraków **1924** B pp. 131–279 pls. vi–xx. [In German.]

553.—Poliński, W. *Auritus hoyeri* n. sp. nebst Beiträgen zur Kenntnis des Subgenus *Titanopoma* A. J. Wagn. Prace Zool. Pol. Panst. Muz. Przyrod. Warsaw **1** 1923 pp. 153–165 pl. xii. [In German.]

554.—Poliński, W. Recherches sur l'anatomie et la systematique des Xérophilinés de la Pologne et de la Transylvanie. Prace Zool. Pol. Panst. Muz. Przyrod. Warsaw **1** 1923 pp. 166–184 pl. xiii–xiv. [In French.]

555.—Portes, F. and **Benoit,** C. La réaction de Heffter et Arnold chez quelques animaux marins. Bul. soc. sci. med. biol. Montpellier **5** 1924 pp. 215–217.

556.—Powell, A. W. B. Notes on New Zealand mollusca. N. Zealand J. Sci. Tech. Wellington **6** 1924 pp. 282–286.

557.—Powell, A. W. B. Description of a new subspecies of *Alcithoë arabica*, Martyn, from New Zealand. Proc. Malac. Soc. London **16** 1924 pp. 108–109.

558.—Powell, A. W. B. On a new species of *Epitonium*. Trans. Proc. N. Zeal. Inst. Wellington **55** 1924 p. 138 pl. v.

559.—Prashad, B. Zoological results of the Percy Sladen trust expedition to Yunnan under the leadership of Professor J. W. Gregory, F.R.S. (1922). Bivalve molluscs. J. Asiat. Soc. Beng. Calcutta N.S. **19** 1924 pp. 423–428.

560.—Prashad, B. Zoological results of a tour in the Far East. Mem. Asiat. Soc. Bengal Calcutta **6** 1924 pp. 522–529 pl. xxii.

Prashad, B. *vide* Annandale, T. N.

561.—Pratje, O. Lassen sich Wanderungen der Leitammoniten im Lias α zwischen Schwäb. Alb und Schweizer Jura nachweisen ? Einige Bemerkungen zu Vollrath : Die Transgression des Jurameeres zwischen Schwäbischer Alb und Schweizer Jura. (Dies. Centralbl. 1924 No. 1 2 u. 3. Centralbl. Min. Stuttgart **1924** pp. 345–351.

562.—Prenant, M. Formations pseudochromosomiques dans les glandes salivaires de *Limnaea stagnalis* L. Bul. soc. zool. Paris **48** 1923 pp. 123–129.

563.—Prenant, M. Remarques sur les processus du formation des spicules cylindriques chez les Chitons. Bul. soc. zool. Paris **48** 1923 pp. 150–157.

564.—Prenant, M. Contributions à l'étude cytologique du calcaire i.—Quelques formations calcaires du conjonctif chez les gastéropodes. Bul. sci. France Belgique Paris **58** 1924 pp. 331–380 pl. xiv.

565.—Principi, P. Arturo Issel. Bol. Soc. geol. ital. Roma **42** 1924 pp. xx–xxiv.

566.—Principi, P. Studio geologico dei terreni ad est della Catena del Catria. Bol. Soc. geol. ital. Roma **42** 1924 pp. 37–47.

Prouty, W. F. *vide* Swartz, C. K.

567.—Pruvot-Fol, A. Etude de quelques gymnosomes méditerranéens des pêches de l'"Orvet" en 1921 et 1922. Arch. Zool. Paris **62** 1924 pp. 345–400 pls. xv–xvi.

568.—Quast, P. Chemische Untersuchung des Organextrakts der Konkrementendrüse und des Nephridium von *Cyclostoma elegans*. Drap. Zs. Biol. München **80** 1924 pp. 211–222.

569.—Quast, P. Die Konkrementenspeicher ("Konkrementendrüse" Claparèdes) von *Cyclostoma elegans* Drap. Zs. ges. Anat. München **72** 1924 pp. 169–198.

570.—Quick, H. E. Length of life of *Paludestrina ulvae*. J. Conch. Leeds **17** 1924 p. 169.

571.—Rands, R. D. Snails as predisposing agents of sugar cane "root disease" Louisiana. J. Agric. Res. Washington **28** 1924 pp. 969–970.

572.—Rau, L. R. On the age of the Utatur marine transgression. J. Asiat. Soc. Beng. Calcutta **19** 1924 pp. 87–89.

573.—Reagan, A. B. Cretacic mollusca of Pacific slope. Pan-Amer. Geol. Des Moines **41** 1924 pp. 179–189 pls. xviii–xxi.

574.—Reed, F. R. C. Some new Ordovician and Silurian fossils. Geol. Mag. London **61** 1924 pp. 25–31 pl. iii.

575.—Reeside, J. B. A new nautiloid cephalopod *Entrephoceras sloani*, from the Eocene of South Carolina. Proc. U. S. Nat. Mus. Washington **65** 1924 pp. 1–4 pls. i–ii.

576.—Rehder, H. A. A list of mollusks from Intervale, N. H. Nautilus Boston Mass **37** 1924 pp. 96–97.

577.—Remy, P. Note sur la répartition géographique de *Lithoglyphus naticoides* de Férussac (Gastrop. Prosobr.). Ann. biol. lacustre Bruxelles **13** 1924 pp. 83–91.

578.—Remy, P. Géonémie du genre *Lithoglyphus* (Gastrop. Prosobr.). Migration vers l'Ouest de l'Europe d'une espèce pontique. Arch. zool. Paris **62** (Notes et Revue) 1924 pp. 4–20.

579.—Ritchie, J. Fertility of the common whelk or buckie. Scot. Nat. Edinburgh No. **150** 1924 pp. 189–190.

580.—Robert, A. Sur la morphologie des gastéropodes. Bul. soc. zool. Paris **45** 1920 pp. 215–224.

581.—Robson, G. C. On new species, etc., of Octopoda from South Africa. Ann. Mag. Nat. Hist. London **13** 1924 pp. 202–210.

582.—Robson, G. C. On a new *Doratopsis*-stage of *Cheiroteuthis* from S. E. Africa. Ann. Mag. Nat. Hist. London **13** 1924 pp. 591–594.

583.—Robson, G. C. On the cephalopoda obtained in South African waters by Dr. J. D. F. Gilchrist in 1920–21. Proc. Zool. Soc. London **1924** pp. 589–686 pls. i–ii.

584.—Robson, G. C. Preliminary report on the Cephalopoda (Decapoda) procured by the S.S. "Pickle." Union S. Africa Fish. Mar. Biol. Surv. Special Repts. **9** 1924 pp. 1–14.

Robson, G. C. *vide* Carleton, H. M.

585.—Rogers, T. H. Electrical methods of staining the radulae of mollusca. J. R. Microsc. Soc. London **1924** pp. 295–298.

586.—Rollier, L. Sur la Spirale des Ammonites (Résumé). Eclogae Geol. Helvet. Lausanne **18** 1923 pp. 374–377.

587.—Rollier, L. Sur la détermination de quelques Ammonoïdes calloviens et oxfordiens. Eclogae Geol. Helvet. Lausanne **18** 1923 pp. 377–385.

588.—Rollier, L. Rectification de nomenclature. Rev. crit. paléozool. Paris **27** 1923 p. 67.

589.—Roman, F. Études sur le Collovien de la Vallée du Rhone. Trav. Lab. Geol. Lyon **6** Mem. 5 1924 pp. 5–111 pls. i–xii.

590.—Rosanoff, A. Sur la question de l'age des couches à *Cardioceras alternans* de la Russie centrale. Bul. Com. Geol. Petrograd **37** 1920 pp. 629–647. [In Russian.]

591.—Rosen, O. V. Contributions à la conaissance de la malacofaune du Caucase. Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** 1922 pp. 367–370. [Paper in Russian with diagnoses in Latin.]

592.—Roughley, T. C. Oyster culture on the George's River, New South Wales. Techn. Educ. Ser. No. **25** Technolog. Mus. Sydney 1922 pp. 1–69.

593.—Rözsenyi, I. Édesvizi. kagylók felhasználása táplálékul. Termt. Közl. Budapest **56** 1924 pp. 254–255. [In Magyar.]

Runnström, J. *vide* Hammarsten, O.

594.—S., C. M. Den 8 Oktober 1922. Malakologisk og entomologisk Ekskursion til Bagsværd Sø samt Frederiksdal og Fiskebœk langs Furesøen under ledelse af Mag. scient. C. M. Steenberg. Deltagernes Antal var. 22. Videns Medd. nat. For. Kjöbenhavn **76** 1923 pp. xxiii–xxiv.

595.—Sacco, F. Nuovi cenni di fossili cretacei negli Argilloschisti dell' Appennino settentrionale. Atti Acc. sc. Torino **59** 1924 pp. 30–43.

597.—Sardeson, F. W. Habit of an ordovicic pelecypod. Pan-Amer. Geol. Des Moines **42** 1924 pp. 345–356 pl. xxii.

598.—Savage, T. E. Richmond rocks of Iowa and Illinois. Amer. J. Sci. New Haven Conn. **8** 1924 pp. 411 427.

599.—Schafarzik, F. *Hypospatangus hantkeni*, Pav. sp. fajnak Budapesten a Budai Márgálan való újabb tömeges elofordulásáról. Über ein neues Massenhaftes Vorkommen von *Hypospatangus hantkeni* Pavay sp. im Ofener Mergel zu Budapest. Földt. Kozl. Budapest **51-52** 1923 pp. 7–9 85–86. [German translation at p. 85.]

600.—Schilder, F. A. Systematiches Verzeichnis der lebenden Cypraeidae. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 234–237.

601.—Schilder, F. A. Systematischer Index der rezenten Cypraeidae. Arch. Natg. Berlin Abt. A. **90** pt. iv 1924 pp. 179–214.

602.—Schilder, F. A. Bemerkungen zu einigen fossilen *Cypraea*-Arten. Senckenbergiana Frankfurt a. M. **5** 1923 pp. 96–100.

603.—Schilder, F. A. Drei neue miozäne *Cypraea*-Arten. Senckenbergiana Frankfurt a. M. **5** 1923 pp. 100–107.

604.—Schiller, W. Die meerischen Grenzschichten der Kreide und des Tertiärs von Roca in Nordpatagonien. Geol. Rdsch. Berlin **13** 1922 pp. 193–216.

605.—Schindewolf, O. H. Bemerkungen zur Stratigraphie und Ammoneenfauna des Saalfelder Oberdevons. Senckenbergiana Frankfurt a. M. **6** 1924 pp. 95–113.

606.—Schindewolf, O. H. Ueber die Siphonalbildungen der Ammonoiden. Sitzb. Ges. Natw. Marburg **1920** 1921 pp. 32–42.

607.—Schlesch, H. *Helicigona arbustorum* (L.) var. *pseudorudis* n. var. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 212–213.

608.—Schlesch, H. Zur Kenntnis der pliocänen Cragformation von Hallbjarnarstadur, Tjörnes, Nord-island und ihrer Molluskenfauna. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 309–370 pls. i–xii.

609.—Schlesch, H. *Acmaea testudinalis* (Müller) var. *albida* nov. var. Naturalist London **1924** No. 814 p. 336.

610.—Schlesch, H. *Pupilla muscorum* (L.) monst. *sinistrorsum*. Naturalist London **1924** No. 814 p. 336.

611.—Schlesch, H. *Margaritana margaritifera* (Linné) in Labrador. Naturalist London **1924** No. 814 p. 336.

612.—Schlesch, H. *Margaritana margaritifera* Linné in Labrador. Nautilus Boston Mass. **38** 1924 p. 32.

Schlesch, H. *vide* Soós, L.

613.—Schlosser, M. Die Cenomanfauna der Bayrischen Alpen. Centralbl. Min. Stuttgart **1924** pp. 82–95.

614.—Schneider, R. Verbreitung und Bedeutung des Eisens im animalischen Organismus. (Im Besondern erforscht am Seetierleben des Golfes von Neapel.) Arch. Natg. Berlin Abt. A. **90** pt. iv 1924 pp. 1–48. [Mollusca at p. 25.]

615.—Seurat, M. G. Les formations quaternaires de la Syrie mineure. C.R. Acad. sci. Paris **179** 1924 pp. 1409–1412.

616.—Sherborn, C. D. Index animalium sive index nominum quae ab A.D. MDCCLVIII generibus et speciebus animalium imposita sunt. Part iv. Index Bail—Byzos **1924** pp. 641–943; Part v. Index C.—Ceyl. **1924** pp. 945–1196.

Shimizu, S. *vide* Yabe, H.

617.—Skowron, S. Stosunek plazimo-jądrowy podczas spermatogenezy u *Helix pomatia*.—Le rapport plasmo-nucléaire pendant la spermatogènese chez *Helix pomatia*. Bul. Intern. Acad. Kraków **1924** B pp. 341–364. [In French.]

618.—Sokolov, D. N. [A collection of fossils from the islands Preobrazhenia and Begitchev.] Trav. Mus. Geol. Miner. P. le Gr. près l'Acad. Imp. Sci. Petrograd **8** 1916 (for 1914) p. 175. [In Russian.]

619.—Sokolov, D. N. [Report on the work in 1914.] Trav. Mus. Géol. Miner. Emp. P. le G. près l'Acad. Sci. Petrograd **3** 1922 for. 1917–1919 p. 124. [In Russian.]

620.—Solá, P. J. Jaciment al Vallès (prov. de Barcelona) de *Bulimus gerundensis* associat a un *Melanopsis*. Buttl. Inst. Catal. N.H. Barcelona Ser. 2 **3** 1923 p. 90.

621.—Soós, L. Zur Kenntnis des Genitalapparates von *Orcula*. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 169–171.

622.—Soós, L. and **Schlesch,** H. Notes on some Arctic mollusca from Greenland. Ann. Hist.-Nat. Mus. Nat. Hung. Budapest **21** 1924 pp. 94–104.

623.—Spath, L. F. On a new ammonite (*Engonoceras iris* sp. n.) from the Gault of Folkestone. Ann. Mag. Nat. Hist. London Ser. 9 **13** pp. 504–508.

624.—Spath, L. F. On the ammonites of the Speeton Clay and the subdivisions of the Neocomian. Geol. Mag. London **61** 1924 pp. 73–89.

625.—Spath, L. F. On the Blake collection of ammonites from Kachh, India. Mem. Geol. Surv. Ind. Calcutta N.S. **9** 1924 Mem. 1 pp. 1–29.

626.—Spath, L. F. A monograph of the ammonoidea of the Gault. Monogr. Palaeont. Soc. London **88** 1923 pp. 1–72 pls. i–iv.

627.—Spath, L. F. New Speeton ammonites. Naturalist London **1924** pp. 173–174.

628.—Spath, L. F. The ammonites of the Blue Lias. Proc. Geol. Ass. London **35** 1924 pp. 186–211 pl. xviii.

629.—Stankovitch, S. Sur une anomalie du système nerveux de la limnée. (*Limnaea stagnalis* L.). C.R. soc. biol. Paris **90** 1924 pp. 1079–1081.

630.—Stark, P. Das Auftreten von *Planorbis vorticulus* in Baden. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 95–98.

631.—Steel, T. Observations on *Helix aspera* in Australia. Proc. Linn. Soc. N. S. Wales Sydney **49** 1924 pp. 151–152.

632.—Stefanini, G. Il retico nei dintorni di Selvena (Siena) e i suoi fossili. Bol. Soc. geol. ital. Roma **42** 1923 for 1924 pp. 48–57 pl. v.

633.—Stefanini, G. Fossili terziari della Cirenaica. Palaeontogr. Italica Pisa **27** 1921 [for 1924] pp. 101–146 [1–46] pls. xvi–xviii [i–iii]. [*See* Zool. Record, Vol. lx.]

634.—Stehelin, P. Les mollusques à l'Hartmannswillerkopf. Bul. soc. zool. Paris **45** 1920 pp. 159–162.

635.—Stelfox, A. W. *Helicella heripensis* in Co. Kildare. Irish Nat. Dublin **33** 1924 p. 67.

636.—Stelfox, A. W. *Helicella heripensis* in Ireland. J. Conch. Leeds **17** 1924 p. 182.

637.—Stengel, E. Die Entstehung von Schalenreaktionsformen von *Unio crassus* und *Anodonta cygnea* im Flussgebiet der Weissen Elster. Jenaische Zs. Natw. **60** 1924 pp. 531–562 pls. xxx–xxxiii.

638.—Stephenson, T. A. Notes on *Haliotis tuberculata* i. J. Mar. Biol. Ass. Plymouth **13** 1924 pp. 480–495.

639.—Steuer, A. Marine Conchylien aus dem Mainzer Becken. Abh. geol. Landesanst. Darmstadt **6** 1912 pp. 1–65 pls. i–vii.

640.—Steusloff, U. Ein Beitrag zur Molluskenfauna Nordost-Frankreichs. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 110–136.

641.—Steusloff, U. Zwergformen aus dem Kreise der *Valvata piscinalis* (O.F. Müller). Arch. Ver. Natg. Güstrow **75** 1922 pp. 27–35.

Stewart, G. A. *vide* Branson, E. B.

642.—Stiles, C. W. The International Commission on Zoological Nomenclature. Science New York N.Y. **60** 1924 pp. 84–85.

643.—S[torrow], B. *Sepia officinalis*, L. Rep. Dove Mar. Lab. Cullercoats N. S. **12** 1923 p. 151.

644.—Strémooukhof, D. Les ammonites de la montagne Eguer-Oba près de Koktebel (Deuxième article). Bul. Com. Géol. Sect. Moscou Petrograd **1** 1923 pp. 267–286 pl. iv.

645.—Strong, A. M. Notes on the *Donax* of California. Nautilus Boston Mass. **37** 1924 pp. 81–84.

646.—Strong, A. M. Notes on *Lacuna* from the Californian Coast. Nautilus Boston Mass. **38** 1924 pp. 16–18.

647.—Strong, A. M. Notes on *Acanthina* from California. Nautilus Boston Mass. **38** 1924 pp. 18–22.

648.—Sümeghy, J. Diósjenő környéke miocén-kori rétegei s azok faunái. Ueber die Schichten und die Fauna des Miocäns der Umgebung von Diósjenö. Földt. Kozl. Budapest **51-52** 1923 pp. 31–39 100–102. [German resumé at p. 100.]

649.—Swartz, C. K. and **Prouty,** W. F. Systematic Palaeontology. Silurian. Maryland Geol. Surv. Silurian Mem. **1923** pp. 467–499 pls. xxvii–xxxiii.

650.—Szajnocha, W. Przekrój warstw karpackich między Ustroniem a źródłowiskami Wisty pod Magórką i Baranią. Rocz. Pols. Tow. Geol. Krakow **1** 1923 pp. 1–20. [In Czech.]

Tansey, V. O. *vide* Branson, E. B.

651.—Taylor, J. W. The significance of the intestinal convolutions and shell structure in the genus *Milax*, with remarks upon the hyperstrophic inversion. J. Conch. Leeds **17** 1924 pp. 129–133.

652.—Terni, T. I tessuti a grandi cellule vescicolose con glicogeno. Monitore zool. ital. Firenze **35** 1924 pp. 13–24.

653.—Thalmann, H. Die Fauna des Vindobonien vom Imihubel bei Niedermuhlern (Kt. Bern). Eclogae Geol. Helvet. Lausanne **18** 1923 pp. 366–371.

654.—Thalmann, H. Die ersten Sonninien aus dem Bajocien der helvetischen Decken. Eclogae Geol. Helvet. Lausanne **18** 1923 pp. 371–374.

655.—Thiel, M. E. Versuch die Verbreitung der Arten der Gattung *Sphaerium* in der Elbe bei Hamburg aus ihrer Lebensweize zu erklären. Arch. Hydrobiol. Stuttgart Suppl. **4** 1924 pt. 1 pp. 1–60.

656.—Thiele, J. Ueber die Systematik der Columbelliden. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 200–210. pl. ix.

657.—Thiele, J. Revision des Systems der Trochacea. Mitt. zool. Mus. Berlin **11** 1924 pp. 47–74.

Thielmann, F. *vide* Holtz, F. and Kutscher, F.

658.—Thomas, A. G. Echinoderms of the Iowa Devonian. Ann. Rep. Iowa Geol. Surv. Des Moines **29** 1919–1920 for 1924 pp. 385–552. [Mollusc (*Platyceras* n. sp.) described in footnote on p. 451.]

659.—Tomlin, J. R. le B. Mollusca in Gray's "Spicilegia Zoologica." Conclusion. London: Janson & Sons **1924** pp. 16–18 pls. xxix–xxxvii.

660.—Tomlin, J. R. le B. Notes on some Mactridae. J. Conch. Leeds **17** 1924 pp. 134–136.

661.—Tomlin, J. R. le B. Mollusca of the Wilkins Australian Islands Expedition (1923). J. Conch. Leeds **17** 1924 pp. 147–148.

662.—Tomlin, J. R. le B. *Parviterebra*. Nautilus Boston Mass. **37** 1924 p. 106.

663.—Tomlin, J. R. le B. Description of a new species of *Clanculus* (*C. gatliffi*). Proc. Malac. Soc London **16** 1924 p. 24.

664.—Tomlin, J. R. le B. Note on the identity of *Lottia* (?) *costata*, Sowerby. Proc. Malac. Soc. London **16** 1924 p. 98.

665.—Tomlin, [J. R. le B.]. Reversed specimens of British land and freshwater mollusca, with certain foreign specimens. Proc. Malac. Soc. London **16** 1924 p. 110.

666.—Torres, [y] **Minguez,** A. La *Parmacella Deshayesi* Moq-Tand. a Espanya (Algeciras). Buttl. Club Mantanyenc Barcelona **3** No. 8 1924 pp. 5–7 pl.

667.—Torres [y] **Minguez** [A.].? Sp. n. *Amalia crystallina*. Buttl. Club Mantanyenc Barcelona **3** No. 7 1924 pp. 7–10 pl.

668.—Torres [y] **Minguez,** A. Notas malacológicas. Buttl. Inst. Catal. N.H. Barcelona Ser. 2 **4** 1924 pp. 104–107.

669.—Torres y Minguez, A. *Buchanania reticulata*. Buttl. Inst. Catal. N. H. Barcelona **4** 1924 pp. 146–147.

670.—Trask, P. D. The Briones formation of Middle California. Univ. Cal. Publ. Geol. Berkeley **13** 1922 pp. 133–174 pls. i–viii.

Treacher, L. *vide* Kennard, A. S. and Woodward, B. B.

671.—Trechmann, C. T. The carbonaceous shale or Richmond formation of Jamaica. Geol. Mag. London **61** 1924 pp. 1–19 pls. i, ii.

672.—Trechmann, C. T. The Cretaceous limestones of Jamaica and their mollusca. Geol. Mag. London **61** 1924 pp. 385–408 pls. xxii–xxvi.

673.—Trueman, A. E. Lower Lias section at Hayden, near Cheltenham . . . With notes on the ammonites. Proc. Cotteswold Nat. F. Cl. **21** 1923 pp. 167–174 pl. ix.

674.—Trueman, A. E. A new fossil gasteropod from New Zealand. Trans. Proc. N. Zeal. Inst. Wellington **55** 1924 pp. 601–604.

675.—Turchini, J. Démonstration des organes phagocytaires du poulpe (*Octopus vulgaris* Lam.) et remarques sur la structure cytologique des branchies de cet animal. Bul. soc. zool. Paris **48** 1923 pp. 117–119.

676.—Turchini, J. Le canal rénopéricardique du poulpe (*Octopus vulgaris* Lam.). Bul. soc. zool. Paris **48** 1923 pp. 113–117.

677.—Turchini, J. Sur la valeur des glandes hypobranchiales du poulpe (*Octopus vulgaris* Lam.). Bul. soc. zool. Paris **48** 1923 pp. 203–204.

678.—Turchini, J. Contribution à l'étude de l'histologie comparée de la cellule rénale. C.R. Assoc. Anat. Paris **17** 1922 pp. 291–300.

679.—Turchini, J. Caractères histologiques endocriniens des glandes hypobranchiales des céphalopodes dibranchiaux. C.R. Assoc. Anat. Paris **18** 1923 pp. 477–478 537.

680.—Twenhofel, W. H. The geology and invertebrate palaeontology of the Comanchean and "Dakota" formations of Kansas. Bul. State Geol. Surv. Kansas Topeka **9** 1924 pp. 1–135 pls. vii–xxiii. [Mollusca at p. 53.]

681.—Uhl, F. Beitrag zur Molluskenkunde der Schwäbisch-Bayrischen Hochebene. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 231–233.

Valentini, V. *vide* Botazzi, F.

682.—Vanatta, E. G. Land shells of Admiral's Cave, Bermuda. Nautilus Boston Mass. **38** 1924 pp. 6–7.

683.—Vanatta, E. G. Descriptions of four new American shells. Proc. Acad. Nat. Sci. Philadelphia **76** 1924 pp. 25–27.

684.—Vanatta, E. G. Four new species of shells. Proc. Acad. Nat. Sci. Philadelphia **76** 1924 pp. 423–425.

Vanatta, E. G. *vide* Pilsbry, H. A.

685.—Vardabasso, S. Uno sguardo alla stratigrafia del Terziario dell' Istria a proposito di un nuovo livello fossilifero. Atti Acc. ven.-trent. Padova **14** 1924 pp. 27–45.

686.—Verne, J. Contribution histologique à l'étude de la sécrétion dans la glande salivaire postérieure des céphalopodes. C.R. Assoc. Anat. Paris **17** 1922 pp. 309–320.

687.—Vinassa de Regny, P. iii. Molluschi cretacei della Tripolitania. in **Zaccagna,** D. Itinerari geologici nella Tripolitania occidentale. Mem. Descr. Carta Geol. Ital. Roma **18** 1919 pp. 95–117 pls. v–viii.

688.—Viret, Société scientifique du Bourbonnais et du centre de la France. Excursions de 1924. ii. Montaigu-le-Blin. Rev. sci. Bourbon Moulins **1924** pp. 189–198 (191–195).

689.—Vollrath, P. Die Transgression des Jurameeres zwischen Schwäbischer Alb und Schweizer Jura. Centralbl. Min. Stuttgart **1924** pp. 53–59.

690.—Wagner, R. Neue Beobachtungen aus dem Muschelkalk und Röt von Jena. Jahrb. geol. Landesanst. Berlin **42** 1922 pp. 1–16.

691.—Walcott, C. D. Cambrian geology and paleontology iv No. 9.—Cambrian and Ozarkian Brachiopoda, Ozarkian Cephalopoda and Notostraca. Smithsonian Misc. Collect. Washington **67** 1924 No. 9 pp. 477–554 pls. cvi–cxxvi. [Mollusca at p. 527.]

692.—Walker, B. *Amphidromus virescens* (Swainson). Nautilus Boston Mass. **37** 1924 pp. 84–88 pl. v.

693.—Walker, B. The varietal names of *Polygyra profunda* (Say). Nautilus Boston Mass. **38** 1924 pp. 33–34.

694.—Walker, B. Two new naiades from Nicaragua. Nautilus Boston Mass. **38** 1924 pp. 51–53 pl. i.

695.—Wallerius, I. D, Skalgrusområdet vid Linneviken jämte några andra skalförekomster på nordvåstra Tjörn. Geol. För. Förh Stockholm **46** 1924 pp. 225–247.

696.—Weber, H. Ein Umdreh- und ein Fluchtreflex bei *Nassa mutabilis*. Zool. Anz. Leipzig **60** 1924 pp. 261–269.

697.—Weber, L. Die Mantel- und Geschlechtsorgane von *Cyclophorus ceylanicus* (Sowerby). Jenaische Zs. Natw. **60** 1924 pp. 397–438 pls. xxiii–xxiv.

698.—Wenz, W. Ueber zwei fossile Helicodontinae: *Canariella disciformis* (Wenz) und *Caracollina noerdlingensis* n. sp. Arch. Molluskenkunde Frankfurt **56** 1924 pp. 13–17 pl. ii.

699.—Wenz, W. Über den Zusammenhang des Mainzer Beckens mit dem Nordmeere und die Altersfrage von Meeressand und Cerithienschichten. Centralbl. Min. Stuttgart **1924** pp. 210–215.

700.—Wenz, W. Die Flammenmergel der Silvanaschichten und ihre Fauna. Jarhesber. oberrhein geol. Ver. Stuttgart **1924** pp. 181–186.

701.—Wenz, W. Die Land- und Süsswassermolluskenfauna der Rieskalke. Jahresber. oberrhein geol. Ver. Stuttgart **1924** pp. 187–189.

702.—Wenz, W. Zur Nomenklatur tertiärer Land- und Süsswassergastropoden vi. Senckenbergiana Frankfurt a. M. **6** 1924 pp. 221–223.

703.—White, G. M. Reactions of the larvae of the shrimp *Palaemonetes vulgaris* and the squid, *Loligo pealii*, to monochromatic light. Biol. Bull. Wood's Hole Mass. **47** 1924 pp. 265–273.

704.—Whitehouse, F. W. Dimitobelidae—a new family of cretaceous belemnites. Geol. Mag. London **61** 1924 pp. 410–416.

705.—Whitehouse, F. W. The Queensland *Inocerami* collected by M. Lumholz in 1881. Proc. R. Soc. Queensland Brisbane **35** 1924 pp. 127–132 pls. v–vii.

706.—Whitehouse, F. W. and **Brighton,** A. G. Notes on some neocomian cephalopoda from Speeton. Naturalist London **1924** pp. 359–360.

707.—Whittaker, E. J. Freshwater mollusca from Mackenzie River Basin, Canada. Nautilus Boston Mass. **38** pp. 8–12.

708.—Wilckens, O. *Lahillia* and some other fossils from the Upper Senonian of New Zealand. Trans. Proc. N. Zeal. Inst. Wellington **55** 1924 pp. 539–544 pl. liv.

709.—Williams-Vaughan, J. The marine mollusca of Dinard. J. Conch. Leeds **17** 1924 pp. 174–177.

710.—Wilson, A. E. A new genus and a new species of gastropod from the Upper Ordovician of British Columbia. Canad. Field. Nat. Ottawa **38** 1924 pp. 150–151 pls. i–ii.

711.—Winckworth, R. *Lepton squamosum* (Montagu). J. Conch. Leeds **17** 1924 p. 158.

712.—Winckworth, [R.]. Specimens of molluscs and other animals associated with them found in a day's digging at Salcomb. . . Proc. Malac. Soc. London **16** 1924 p. 1.

713.—Wolff, W. Über weitere Vorkommen der interglazialen Eemfauna im nordwestdeutschen Küstengebiet. Zs. D. geol. ges. Berlin B Monastb. **75** 1924 pp. 177–179.

714.—Woodring, W. P. Tertiary history of the North Atlantic Ocean. Bul. Geol. Soc. Amer. New York **35** 1924 pp. 84–85.

715.—Woodring, W. P. West Indian, Central American and European Miocene and Pliocene molluscs. Bul. Geol. Soc. Amer. New York **35** 1924 pp. 175–176.

716.—Woodward, B. B. On the true date of publication of S. Nilsson's *Historia molluscorum sveciae*. 8vo Lundae, 1822. Proc. Malac. Soc. London **16** 1924 p. 23.

717.—W[oodward], B. B. Obituary. Lieut.-Col. Henry Haversham Godwin-Austen, F.R.S., etc., 1834–1923. Proc. Malac. Soc. London **16** 1924 pp. 82–83.

Woodward, B. B. *vide* Kennard, A. S.

718.—Wright, W. B. Age and origin of the Lough Neagh Clays. Q. J. Geol. Soc. London **80** 1924 pp. 468–488.

719.—Wrigley, A. Faunal divisions of the London Clay illustrated by some exposures near London. Proc. Geol. Ass. London **35** 1924 pp. 245–259.

720.—Wrigley, [A.]. Two examples of shells from the London Clay at Brentwood, Essex, which appear to be a rediscovery of *Camptoceras priscum*, Godw.-Aust., originally described from Sheppey. Proc. Malac. Soc. London **16** 1924 p. 3.

721.—Wrigley, A. and **Davis**, A. G. Palaeontological notes. Proc. Geol. Ass. London **35** 1924 pp. 146–147.

722.—Wulff, R. Das Famennien der Aachener Gegend. Jahrb. geol. Landesanst Berlin **43** 1923 pp. 1–70 pls. i–ii.

723.—Yabe, H., and **Shimizu**, S. A note on the genus *Mortoniceras*. Japan. J. Geol. Geogr. Tokio **2** 1923 pp. 27–30.

724.—Yamchevsky, M. Les schistes argileux près de la ville de Tomsk. Mém. Com. Géol. Petrograd **107** 1915 pp. 1–96 pls. i–viii. [In Russian with French resumé at p. 89: Mollusca at p. 52.]

725.—Yehara, S. Cretaceous *Trigoniae* from South-western Japan. Japan J. Geol. Geogr. Tokio **2** 1923 pp. 59–84 pls. viii–xiii.

726.—Yehara, S. On the Izumi-Sandstone group in the Onogawa-Basin (Prov. Bungo) and the same group in Uwajima (Prov. Iyo). Japan J. Geol. Geogr. Tokio **3** 1924 pp. 27–39 pls. ii–iv.

727.—Yokoyama, M. Tertiary fossils from Kii. Japan J. Geol. Geogr. Tokio **2** 1923 pp. 48–58 pls. vi–vii.

728.—Yokoyama, M. On some fossil shells from the Island of Saishū in the Strait of Tsushima. J. Coll. Sci. Tōkyō **44** Art. 7 1923 pp. 1–9 pl. i.

729.—Yokoyama, M. Tertiary mollusca from Dainichi in Tōtōmi. J. Coll. Sci. Tokyo **45** Art. 2 1923 pp. 1–18 pls. i–ii.

730.—Yokoyama, M. Molluscan remains from the lowest part of the Jô-Ban coal-field. J. Coll. Sci. Tōkyō **45** Art. 3 1924 pp. 1–22 pls. i–v.

731.—Zatwornitzky, A. Mesojurassische Tone im Tale des Kuban. Bul. Com. Géol. Petrograd **33** 1914 pp. 525–558 pls. xvi–xvii. [In Russian with German resumé at p. 556.]

732.—Zill, R. Die subepithelialen Hautdrüsen von *Helix pomatia* und einigen anderen Landgehäuseschnecken. Zs. ges. Anat. München **71** 1924 pp. 1–40.

733.—Zirpolo, G. Osservazioni sulla biofotogenesi. Boll. soc. nat. Napoli **34** 1923 pp. 128–132.

734.—Zirpolo, G. Ricerche sulla simbiosi fra zooxantelle e *Phyllirhoé bucephala* Peron et Leseur. Boll. soc. nat. Napoli **35** 1923 pp. 129–138.

735.—Zirpolo, G. Su di un raro caso di mascheramento osservato in *Patella coerulea* L. Natura Milano **15** 1924 pp. 143–146.

II.—SUBJECT INDEX.

N.B.—*The number in Clarendon Type quoted after the author's name, in both Subject and Systematic Indices, refers to "Titles," where the fuller reference will be found.*

GENERAL.

Historical.—Caziot, **119**; Frierson, **247**; Pinidae: Hedley, **326**; Jekelius, **364**; Jourdy, **371**; Kennard & Woodward, **378**; Norwegian Aeolidiidae: Løyning, **424**; Mortensen, **466**; Nicodim, **481**; Arionidae: Økland, **493**; Pallary, **513**; Poliński, **554**; *Mortoniceras*: Yabe & Shimizu, **723**.

Biography.—[Anon.], **23**; Bordage, **77**; Dautzenberg, **192**; A.D.R. Bacchus: Dean, **195**; Haas, **297**; Hesse, **336**; Hofmann, **342**; Lamy, **396**; Melvill, **453**; J. G. Hidalgo: Moros, **465**; Pallary, **517**; Arturo Issel: Principi, **565**; H. H. Godwin-Austen: W[oodward], **717**.

Bibliography.—Brüel, **95**; Dautzenberg, **192**; Fox, **240**; Hofmann, **342**; Kennard, **373**; Lamy, **396**; Melvill, **453**; J. G. Hidalgo, spp., described by: Moros, **465**; Oldham, **194**; Pallary, **517**; Tomlin, **659, 660** & **662**; Woodward, **716**.

General Treatises and Monographs.—Ashby, **31**; Csiki, **180**; Tithonic fossils of "Casale di Sopra" (Basambra): Gregorio, de, **280**; Australian Loricates: Iredale & Hull, **353**; Jourdy, **371**; Triassic mollusca of Timor: Krumbeck, **388**; Lewinski, **407**; Marine shells of Puget Sound, Oldroyd, **496**; Pallary, **519**; Pilsbry, **541**; Index Animalium: Sherborn, **616**.

Ethno-Conchology. — Frenguelli, **246**.

Local lists.—Bataller, **47**; Bofill i Poch, **64, 65** & **66**; Bofill i Poch & Aguilaramat, **67**; Büttner, **102**; Caziot, **118** & **120**; Corroy, **153** & **154**; Rockall Bank: Dollfus, **206**; Emery, **222**; Eyerdam, **224**; Ferriss, **228**; Grensted, **285**; Henson, **333**; Opisthobranchs of Croisic: Labbé, **391**; Langeron, **399**; Lavier, **400**; King Isd., Tasmania, marine: May, **442**; Økland, **491**; Rehder, **576**; Rosen, **591**; Greenland L. & F. W. Mollusca: Soós & Schlesch, **622**; Vanatta, **682**; Whittaker, **707**.

Museums, Collections, Expeditions.—[Anon.], **23**; Buckman in O'Neill, **97**; Buen, **100**; Dall in O'Neill, **188** & **189**; Davies, **194**; Gregory, **281**; Hanna, **308**; Iredale, **352**; Jackson, **356**; Lamy, **394** & **397**; MacFarland, **425**; Type fossils in Geol. Mus., Ohio State Univ.: Morningstar, **463**; Mortensen, **466**; Nasonov, **474**; Cephalopoda, S. Africa: Robson, **583**.

Classification. — Annandale, **19**; Blanchet, **62**; Blume, **63**; Caziot, **119**; Cerithiidae: Charpiat, **121**; Cockerell, **140**; Athoracophorid slugs: Cockerell, **141**; Dall, **183**; Protoconch as an aid to classification or otherwise: Dall, **184**; Dautzenberg, **192**; Elmhirst, **221**; Hesse, **338**; Iredale, **352**; Australian Loricates: Iredale & Hull, **353**; *Ostrea*: Lamy, **394**; Saxicavidae: Lamy, **397**; Lindholm, **412**; Clausiliidae: Lindholm, **419**; Marwick, **438**; *Cirroteuthis massyae*: Massy, **441**; Ceionidae: Maynard, **445**; Melvill & Peile, **454**; *Balea africana* M. & P.: Pilsbry, **538**; Poliński, **554**; Prashad, **560**; Rollier, **587**; Schilder, **600** & **601**: *Donax*: Strong, **645** & **647**; Thiele, **656**; Trochacea: Thiele, **657**; Tomlin, **660**; *Mortoniceras*: Yabe & Shimizu, **723**.

Nomenclature. — Annandale, **19**; Annandale & Prashad, **22**; Caziot, **116**; Cooper, **150**; Finlay, **230**; Frierson, **247**; *Vallonia costellata*: Haas, **301**; Hanna, **309**; Hesse, **338**; Iredale, **352**; Kennard & Woodward, **377** & **378**; Lindholm, **412, 416** & **419**; Marwick, **438**; Cerionidae: Maynard, **444**; Pilsbry, **537**; Pilsbry & Vanatta, **547**; Robson, **584**; Rollier, **588**; Stiles, **642**; Strong, **647**; Tomlin, **660** & **664**; Walker, **692** & **693**; Wenz, **702**.

Technique.—Agersborg, **6**; Radulae: Bowell, **85** & **86**; Brambell, **87**; Radula of *Physa*: Clench, **136**; Duval, **213**; Gray, **279**; Hedley, **324**; Collection and preservation of Loricates: Iredale & Hull, **353**; Pruvot-Fol, **567**; Staining of radulae: Rogers, **585**.

Economics.—Blake, **61**; C[alman], **103**; Leger, **403**; Mark, **431**; Meer Mohr, **452**; Pallary, **516**; Petit, **531**; Rands, **571**; Roughley, **593**; *Haliotis*: Stephenson, **638**.

Chemical constituents.—McHargue, **426**.

Miscellanea.—Cisneros, de, **129**; Garth, **260**; Hedley, **322**; J[ohnson], **369**; Juday, **372**; Nylander, **487**.

STRUCTURE.

General.—Belemnites: Christensen, **124**; Certain Naiades: Haas, **298**; Certain spp. *Orcula*: Hesse, **335**; *Philomycidae*: Hoffmann, **341**; Australian Loricates: Iredale & Hull, **353**; Norwegian Aeolididae: Løyning, **424**; Certain Ceionidae: Maynard, **445**; Naef, **471**; O'Donoghue, **490**; Arionidae: Økland, **493**; Ortmann, **503**; Helicidae of Poland: Poliński, **552**; Certain Cephalopods: Robson, **583**.

Nervous System.—ANDERSEN, 13; Heteropoda: BRÜEL, 94 & 95; HEIDERMANNS, 328; LEENHARDT, 402; STANKOWITCH, 629; WEBER, 697.

Shell.—*Hippurites*: ANTHONY, 25; Cerithiidae: CHARPIAT, 121; Protoconch: DALL, 184; *Oppelia*: GÜRICH, 294; JOURDY, 371; Uruguayan *Corbicula*: MARSHALL, 434; MARWICK, 438; Operculum of *Cereobullia* (= *Bullia*) *ceroplasta*: MELVILL & PEILE, 454; *Teredo*: MILLER, 457; NEAVERSON, 476; NOWAK, 483; POLIŃSKI, 553; *Chiton*: PRENANT, 563; ROLLIER, 586.

Muscular System.—BUCKMANN, 98; *Helix*: DORELLO, 209; *Parallepipedum*: GHOSH, 268; HEIDERMANNS, 328; JANISCH, 359; LEENHARDT, 402; *Teredo*: MILLER, 457; PLENK, 548.

Vascular System. — Cephalopoda: CAMPS, 104; *Parallepipedum*: GHOSH, 268; *Octopus*: TURCHINI, 677; WEBER, 697.

Alimentary System, Radula and Jaws.—*Hippurites*: ANTHONY, 25 Radulae: BOWELL, 85; BUCKMANN, 98 *Eulota*: COCKERELL, 145; ELMHIRST, 221; *Parallepipedum*, GHOSH, 268; HEIDERMANNS, 328; Radula of *Cereobullia* (= *Bullia*) *ceroplasta*: MELVILL & PEILE, 454; NICODIM, 481; PEILE, 526; PILSBRY, 540; POLIŃSKI, 554; Trochacea: THIELE, 657.

Respiratory Organs. — *Hippurites*: ANTHONY, 25; CARTER, 110; *Parallepipedum*: GHOSH, 268; SCHINDEWOLF, 606; WEBER, 697.

Reproductive Organs.—AGERSBORG, 5; *Doratosepion*: CARLETON & ROBSON, 107; *Eulota*: COCKERELL, 145; *Helix*: DORELLO, 209; MELVILL & PEILE, 454; *Poecilozonites*: PEILE, 527; POLIŃSKI, 554; SOÓS, 621; SOÓS & SCHLESCH, 622; WEBER, 697.

Excretory Organs.—PRENANT, 564; *Octopus*: TURCHINI, 676.

PHYSIOLOGY.

General.—ROBERT, 580.

Glandular Secretions, Pigments.—BOTAZZI & VALENTINI, 82; CROZIER, 175; FRANKENBERGER, 241; HOGBEN, 344; KOLLERMANN, 384; LAMY, 395; *Limnaea*: PRENANT, 562; *Chiton*: PRENANT, 563, 564; QUAST, 569; TURCHINI, 679; VERNE, 686; ZILL, 732.

Sense Organs.—CROZIER & AREY, 176; CROZIER & FEDERIGHI, 177 & 178; HECHT, 321; JOHNS, 368; PIERANTONI, 534.

Reaction to Light.—CROZIER & AREY, 176; HECHT, 317, 318, 319 & 320.

Vascular System.—AGERSBORG, 6; BOTAZZI & BERGAMI, 81; CARDOT, 106; CRAIFALEANU, 165, 166 & 167 DUVAL, 212 & 213; *Octopus*: TURCHINI, 675, 677 & 679.

Generative Organs.—*Helix pomatia* BONNET, 74; BRAMBELL & GATENBY, 88.

Respiratory Organs.—CARTER, 110; *Chromodoris*: CROZIER, 173; Relation of ciliary activity to oxygen consumption: GRAY, 279; HOPKINS, 346; SCHNEIDER, 614; *Octopus*: TURCHINI, 675.

Muscular System.—CROZIER, 174; CROZIER & FEDERIGHI, 177; HOGBEN, 344; HOPKINS, 346; LÖHNER, 421; PORTES & BENOIT, 555.

Alimentary System.—AGERSBORG, 6; CATE, TEN, 111; CRETIN, 171; NICODIM, 480 & 481.

Excretory Organs.—CRETIN, 171; *Limnaea*: PRENANT, 562; *Octopus*: TURCHINI, 676 & 678.

Nervous System.—BRAMBELL & GATENBY, 88; CARLSON, 108; CROZIER & FEDERIGHI, 178; LEWY, 408; MOORE, 461.

Chemical Constituents.—ACKERMANN, 2; ACKERMANN, HOLTZ & KUTSCHER, 3; CRETIN, 171; HOLTZ, KUTSCHER & THIELMANN, 345; QUAST, 568; TERNI, 652.

Experimental.—BOTAZZI & BERGAMI, 81; CARDOT, 106; CARLSON, 108; CLEMENTI, 134; CROZIER, 173 & 174; CROZIER & FEDERIGHI, 177 & 178; CROZIER & AREY, 176; CROZIER & PILZ, 179; DUVAL, 213; Relation of ciliary activity to oxygen consumption:

GRAY, 279; HAYNES, 315; HECHT, 317, 318, 319, 320 & 321; HERWERDEN, VAN, 334; HOPKINS, 346; LEWY, 408; LÖHNER, 421; MOORE, 461; ZILL, 732.

DEVELOPMENT.

General.—GRIMPE, 291; NAEF, 471.

Formation of Gonads.—ELMHIRST, 221

Oogenesis and Ovum.—AGERSBORG, 5; Short reproductive cycle in *Anodonta*: ALLEN, 11; BACHRACH & CARDOT, 37 & 38; BRAMBELL, 87; CARDOT, 105 & 106; DOMET DE VORGES, 208; *Amphibola*: FARNIE, 226; HEILBRUNN, 329; HERWERDEN, VAN, 334; Australian Loricates: IREDALE & HULL, 353; *Agriolimax*: MILES, 455; ORTON, 506; *Buccinum undatum*: RITCHIE, 579; *Haliotis*: STEPHENSON, 638.

Spermatogenesis and Spermatozoon.—AGERSBORG, 5; *Bythinia tentaculata* and *Viviparus viviparus*: ANKEL, 15; BALLOWITZ, 42; DOMET DE VORGES, 208; DORELLO, 210; FADDA, 225; *Amphibola*: FARNIE, 226; SKOWRON, 617; *Haliotis*: STEPHENSON, 638.

Embryology. — Short reproductive cycle in *Anodonta*: ALLEN, 11; ANDERSEN, 12 & 13; AREY, 27; BACHRACH & CARDOT, 37 & 38; CARDOT, 105 & 106; *Amphibola*: FARNIE, 226; FRANKENBERGER, 242; HAMMARSTEN & RUNNSTRÖM, 306; Australian Loricates: IREDALE & HULL, 353; MAZZARELLI, 447 & 448; *Agriolimax* MILES, 455; NELSON, 477; Attachment of oyster larvae: NELSON, 478; ORTON, 506; *Haliotis*: STEPHENSON, 638.

Larval Stages.—*Cheiroteuthis*: ROBSON, 582.

Shell.—BOONE, 75; *Oppelia*: GÜRICH, 294; *Chiton*: PRENANT, 563.

Autotomy and Regeneration.—BORDAGE, 77.

Experimental.—BRAMBELL, 87; HERWERDEN, VAN, 334; *Haliotis*: STEPHENSON, 638.

ETHOLOGY.

General.—THIEL, 655.

Movements and Locomotion.—BOONE, 75; CROZIER & FEDERIGHI, 177 & 178; CROZIER & PILZ, 179; Attachment of oyster larvae: NELSON, 478; SARDESON, 597; *Haliotis*: STEPHENSON, 638; WEBER, 696.

Enemies, Defence and Protection.—AGERSBORG, 6; ARKELL, 28; BOONE, 75; GILCHRIST, 269; HAYNES, 315; LANG, 378; MACINTYRE, 427; ORTON, 507; *Haliotis*: STEPHENSON, 638; ZIRPOLO, 735.

Feeding Habits.—ELMHIRST, 221: Australian Loricates: IREDALE & HULL, 353; JOHNS, 368; Young of *Agriolimax*: MILES, 455; *Haliotis*: STEPHENSON, 638.

Breeding Habits.—Short reproductive cycle in *Anodonta*: ALLEN, 11; *Doratosepion*: CARLETON & ROBSON, 107; DORELLO, 209; ELMHIRST, 221; *Amphibola*: FARNIE, 226; HEDLEY, 325; Australian Loricates: IREDALE & HULL, 353; Norwegian Aeolididae: LØYNING, 424; Uruguayan *Corbicula*: MARSHALL, 434; ORTON, 505; *Lithoglyphus*: REMY, 577; *Haliotis*: STEPHENSON, 638; *Lepton sqamosum*: WINCKWORTH, 711.

Hybridization.—BARTSCH, 43 & 44.

Hyperstrophy.—TAYLOR, 651.

Boring Habits. — *Pholadidea*: HAYNES, 315; MARK, 431; *Teredo*: MILLER, 457 & 458.

Erosion.—STEHELIN, 634.

Special Habits.—BOUTAN, 84; Attachment of oyster larvae: NELSON, 478; *Haliotis*: STEPHENSON, 638.

Behaviour under Certain Conditions.—Stimulation of larvae of *Loligo* by light: WHITE, 703; *Lepton squamosum*: WINCKWORTH, 711.

Colouration.—Australian Loricates: IREDALE & HULL, 353.

Luminosity.—ZIRPOLO, 733; Symbiosis: NUTTALL, 486; PIERANTONI, 534, 535 & 536.

Excretion.—HAYNES, 315.

Habitat.—ADAMSTONE, 4; ALKINS, 10; ATKINS & LEBOUR, 36; BOFILL I POCH & AGUILAR-AMAT, 68 & 70; BRUES, 96; COOPER, 150; CRAPPER, 170; DALGLIESH & [DALGLIESH], 182; Helicidae: ELLIS, 218; GARDINER, 257; *Parallepipedum*: GHOSH, 268; HEATHCOTE, 316; HULL, 349; Australian Loricates: IREDALE & HULL, 353; JOURDY, 371; JUDAY, 372; LABBÉ, 390; LIOUVILLE, 420; ORTON, 506; PALLARY, 516; POLIŃSKI, 554; N. Zealand marine mollusca: POWELL, 556; *Haliotis*: STEPHENSON, 638; TORRES Y MINGUEZ, 669.

Adaptation to Surroundings.—BARTSCH, 44; BAVAY, 49; Protoconch: DALL, 184; GRENSTED, 286; GRIER, 289; HULL, 349; LABBÉ, 390.

Association of Certain Species.—Helicidae: ELLIS, 218.

Acclimatisation, Migration, etc.—BARTSCH, 43; BAVAY, 49; BELLINI, 53; BLUME, 63; CLARKE, 133; COCKERELL, 138 & 144; CRAPPER, 170; DAUTZENBERG & FISCHER, 193; ELLIS, 219 & 220; GARTH, 260; GRIER, 290; HENDERSON, 330; MARCUS, 430; MODELL, 460; Naiades of Lake Erie: ORTMANN, 502; PALLARY, 519; *Lithoglyphus*: REMY, 577 & 578; WOODRING, 714.

Æstivation.—ARKELL, 28; LABBÉ, 390.

Autotomy and Regeneration.—STEEL, 631.

Instinct and Psychology, Tropisms.—STEEL, 631; *Haliotis*: STEPHENSON, 638.

Rate of Growth.—HOPKINS, 346; *Placuna*: PEARSON, 525.

Nacreous Growths.—HAYNES, 315.

Longevity.—CIRIA, 126; *Paludestrina ulvae*: QUICK, 570.

Sexual Dimorphism.—DOMET DE VORGES, 208.

Parasitism, Commensalism and Parasites.—AGERSBORG, 6; ATKINS & LEBOUR, 36; CAWSTON, 112, 113, 114 & 115; CLARK, 131; FAUST, 227; HAYNES, 315; KOEHLER, 383; LAVIER, 400; MILLER, 456; Symbiosis: NUTTALL, 486; O'DONOGHUE, 490; PIERANTONI, 535 & 536; THOMAS, 658; WINCKWORTH, 712; ZIRPOLO, 734.

Evolution.—NAEF, 471.

VARIATION AND AETIOLOGY.

Teratology, Phylogeny and Relationship.—Genital organs of *Helix pomatia*: BONNET, 74; Balemnites: CHRISTENSEN, 124; CRAMPTON, 169; COOPER, 149; FULTON, 250; *Parallepipedum*: GHOSH, 268; Philomycidae: HOFFMANN, 341; HOFMANN, 343; Australian Loricates: IREDALE & HULL, 353; JOURDY, 371; MARWICK, 438; NAEF, 471; O'MAHONY, 499; Cypraeidae: SCHILDER, 601; SCHINDEWOLF, 606; SCHLESCH, 610; STEEL, 631; TAYLOR, 651; TOMLIN, 665.

Evolution.—*Viviparidae*: ANNANDALE, 20; BARTSCH, 44; BLANCHET, 62; BLUME, 63; Cerithiidae: CHARPIAT, 121; ELLES, 216; *Parallepipedum*: GHOSH, 268; JOURDY, 371; MODELL, 460; STANKOWITCH, 629; STENGEL, 637.

Variation in Form.—CIRIA, 125; CRAMPTON, 169; GILLET, 270; GRENSTED, 286; GYNGELL, 295; JOURDY, 371; *Planorbis*: PILSBRY, 545; POLIŃSKI, 554; STEEL, 631; STEUSLOFF, 641; VANATTA, 682.

Variation in Colour.—CIRIA, 125; COCKERELL, 138; COOPER, 150; Clausiliidae: DEAN, 196; GODDARD, 271; PILSBRY, 540; STEEL, 631; TAYLOR, 651.

DISTRIBUTION.

(*a*) RECENT.

(*a*) MARINE.

Arctic Ocean.—DERJUGIN, 201.

North Atlantic Ocean, Caribbean Sea and Gulf of Mexico.—[ANON.], 24; BELCHER, 51; BORLEY, 79; BUEN, 100; BUTTERFIELD, 101; CLAPP, 130; C[OWAN], 160; DALL, 183 & 187; DELAP, 199; Rockall Bank: DOLLFUS, 206; Flamborough, faunal list: ELLIS, 217; GARDINER, 257; GRIEG, 288; JACOT, 357; LABBÉ, 390; Opisthobranchs of Croisic: LABBÉ, 391, 392 &

393; LIOUVILLE, 420; Aeolididae: LØYNING, 424; *Cirroteuthis*: MASSY, 441; MEEK, 449 & 450; Molluscan remians in deep-sea deposits: MURRAY & CHUMLEY, 133; PALLARY, 516; *Acmaea testudinalis*, varr. n.: SCHLESCH 609; S[TORROW], 643; WILLIAMS-VAUGHAN, 709.

Mediterranean Sea and Black Sea.—BORCEA, 76; CAZIOT, 118 & 120; PALLARY, 514; Pteropoda: PRUVOT-FOL, 567.

South Atlantic Ocean.—ROBSON, 581; Cephalopoda off Cape Town: ROBSON, 583 & 584.

Indian Ocean.—ANNANDALE, 19; ASHBY, 30, 32, 33 & 34; GHOSH, 268; Pinnidae: HEDLEY, 326; HULL, 347 & 348; Loricates: IREDALE & HULL, 353; O'DONOGHUE, 490; ROBSON, 581, 582, 583 & 584; TOMLIN, 662.

Malaysia.—ASHBY, 32; Pinnidae: HEDLEY, 326; MORTENSEN, 466; *Arca*: OOSTINGH, 500; TOMLIN, 663.

Pacific Ocean.—ANNANDALE & PRASHAD, 22; ASHBY, 32; ASHBY & HULL, 35; BARTSCH, 45 & 46; BROOKES, 91; BUCKNILL, 99; DALL, 183 & 186; EYERDAM, 224; FINLAY, 230 & 234; HEDLEY, 322; Pinnidae: HEDLEY, 326 & 327; HULL, 347, 348 & 349; IREDALE, 352; Loricates: IREDALE & HULL, 353; West Coast Lower California: JORDAN, 370; Opisthobranchs of Gulf of California: MACFARLAND, 425; MARWICK, 440; MILLER, 456 & 458; NASONOV, 474; Puget Sound: OLDROYD, 496; OLSSON, 498; PEILE, 528; N. Zealand: POWELL, 556, 557 & 558; California *Lacuna*: STRONG, 646; TOMLIN, 661; VANATTA, 684.

Southern Ocean.—ASHBY, 30, 31, 32 & 34; Pinnidae: HEDLEY, 326; Loricates: IREDALE & HULL, 353; King Isd., Tasmania: MAY, 442.

(β) NON-MARINE.

Arctic.—ODHNER, 489.

Iceland.—SCHLESCH, 607.

Scandinavia.—ODHNER, 488; ØKLAND, 491, 492; Arionidae: ØKLAND, 493.—ISAGER & NIELSEN, 354; OTTERSTØRM, 508; Local list: S., 594; SCHLESCH, 610.

Germany.—BÜTTNER, 102; HESSE, 337; JAECKEL, 358; STARK, 630; UHL, 681.

Czecho-Slovakia.—FRANCKENBERGER, 243.

Great Britain and Ireland.—ALKINS, 10; Scotland, occ. of *Valvata piscinalis* f. *alpestris*: ANNANDALE, 18; BOLAM, 73; BUTTERFIELD, 101; CARTER, 109; COCKERELL, 140; COOPER, 150; CRAPPER, 170; Sussex, moll. of: DALGLIESH & [DALGLIESH], 182; Dean, 197; *Hyalinia lucida* var. *obscurata*: DEAN, 198; Flamborough, faunal list: ELLIS, 217; Helicidae: ELLIS, 218; ELLIS, 219; Neighbourhood of Market Harborough, faunal list: ELLIS, 220; FYSCHER, 251, 252, 253 & 254; GODDARD, 271; GRENSTED, 283, 284, 285, 286 & 287; GYNGELL, 295; Isle of Man, faunal list: HEATHCOTE, 316; HENSON, 333; KENNARD, 374; O'MAHONY, 499; PEARSALL & MASON, 523 & 524; STELFOX, 635 & 636.

France.—CAZIOT, 117; STEHELIN, 634; STEUSLOFF, 640.

Spain.—AGUILAR-AMAT, 7; BATALLER, 47; BOFILL I POCH, 64, 65 & 66; BOFILL I POCH & AGUILAR-AMAT, 69; FUENTE, DE LA, 249; HAAS, 299 & 300; MOROS, 464; PALLARY, 513; TORRES [Y[MINGUEZ, 666, 667, 668 & 669.

Italy.—BELLINI, 53; DEAN, 196; PILSBRY, 541.

Hungary.—BOKOR, 72; DEAN, 196.

Lithuania.—HOFMANN, 343.

Poland.—Helicidae: POLIŃSKI, 552 & 554.

Balkan Peninsula.—IURINIC, 355; PILSBRY, 541; POLIŃSKI, 553 & 554.

Crete.—LANGERON, 399.

Russia in Europe.—LINDHOLM, 412 & 413; ROSEN, 591.

Transcaucasia.—LINDHOLM, 412, 413 & 415.

Russian Central Asia.—LINDHOLM, 410, 414 & 417.

Eastern Siberia.—COCKERELL, 139, 143 & 145; LINDHOLM, 412, 416 & 418.

Persia.—LINDHOLM, **412.**

British India.—ANNANDALE & CHOPRA, **21.**

China.—ANNANDALE, **16** & **17**; ANNANDALE & PRASHAD, **22**; FAUST, **227**; LINDHOLM, **409**; PRASHAD, **559.**

Japan.—FAUST, **227**; PILSBRY, **543**; PRASHAD, **560.**

Malaysia, Philippine Islands.—LINDHOLM, **411**; PILSBRY, **544.**

Asia as a whole.—HAAS, **296.**

N. Africa.—LAVIER, **400**; BOFILL I POCH & AGUILAR-AMAT, **67**; PALLARY, **515, 518** & **519.**

E. and C. Africa.—ARKELL, **28.**

S. Africa.—CAWSTON, **114**; *Balea africana* M. & P.: PILSBRY, **538.**

Greenland.—SOÓS & SCHLESCH, **622.**

Canada.—JOHANSEN, **369**; SCHLESCH, **611** & **612**; WHITTAKER, **707.**

Alaska.—EYERDAM, **224.**

N.E. United States.—GRIER, **290**: JUDAY, **372**; Naiades of Lake Erie; ORTMANN, **502**; REHDER, **576**; VANATTA, **683** & **684.**

E. United States.—Alleghany Mts. PILSBRY, **546.**

S.E. United States.—CLENCH, **135**; EMERY, **222**; GOODRICH, **273**; ORTMANN, **503.**

W. United States.—BAKER, **39**; BERRY, **54**; COCKERELL, **138**; FERRISS, **228**; HANNA, **310**; HENDERSON, **330** & **331**; PILSBRY, **539** & **540**; VANATTA, **683.**

Mississippi River System:—**Ortmann, 504.**

Mexico.—HANNA, **308.**

West Indies.—BAKER, **40** & **41**; BARTSCH, **44**; EMERY, **222**; Cerionidae MAYNARD, **443, 444** & **445**; Cerionidae: MAYNARD & CLAPP, **446**; PILSBRY, **545.**

Nicaragua.—WALKER, **694.**

United States of Colombia.—POLIŃSKI, **549.**

Venezuela.—ALDERSON, **8**; BAKER, **41.**

Peru.—PILSBRY, **545**; POLIŃSKI, **549**; Clausiliidae: POLIŃSKI, **551.**

Ecuador.—Vaginulidae: COLOSI, **147.**

Chile.—MARSHALL, **433.**

Uruguay.—*Corbicula*: MARSHALL, **434.**

Paraguay. — Vaginulidae: COLOSI, **147.**

Bolivia.—Vaginulidae: COLOSI, **147**; PILSBRY, **545.**

Argentina.—Vaginulidae: COLOSI, **147**; Vaginulidae: GAMBETTA, **256**; MARSHALL, **433.**

Brazil.—Vaginulidae: COLOSI, **147**; PILSBRY, **545.**

New South Wales.—HEDLEY, **323**; STEEL, **631.**

Queensland.—HEDLEY, **323**; TOMLIN, **661.**

Pacific.—Athoracophorid slugs: COCKERELL, **141, 142** & **144**; CRAMPTON, **168**; GREGORY, **281**; Athoracophoridae: GRIMPE & HOFFMANN, **292.**

Atlantic Islands.—Bermuda: PEILE, **527**; PILSBRY, **542**; VANATTA, **682** & **684.**

(*b*) FOSSIL.

Quaternary. — Freshwater moll. Russia in Europe and Asia: BOGATCHEV, **71**; BROWN, **93**; GEGEL, **255**; GEYER, **266**; HÄGG, **303**; HENDERSON, **330**; JORDAN, **370**; KENNARD & WOODWARD in TREACHER, **376**; KLETT, **382**; Cerionidae: MAYNARD, **443**; Cerionidae: MAYNARD & CLAPP, **446**; NAUMANN, **475**; *Poecilozonites*: PEILE, **527**; PILSBRY, **542**; Poland: POLIŃSKI, **550**; SEURAT, **615**; VANATTA, **682** & **684**; WALLERIUS, **695**; WOLFF, **713.**

Cainozoic.—Fossils from Aru Isds.: COX, **163**; Denmark: JESSEN, **366**; WENZ, **693** & **700.**

Pleistocene.—Andrusov, **14**; Freshwater moll., Russia in Europe and Asia: Bogatchev, **71**; Dall in O'Neill, **189**; Geyer, **266**; Hanna, **307** & **309**; Pleistocene of England: Kennard, **375**; Kennard & Woodward, **378**; Oldroyd, **495**; Lower San Pedro series: Oldroyd, **497**; Øyen, **509**; Pallary, **512**; Petrbok, **533**.

Tertiary.—Alemagna, **9**; Bellini, **52**; Freshwater moll., Russia in Europe and Asia: Bogatchev, **71**; Cerithiidae: Charpiat, **121**; Checchia-Rispoli, **122** & **123**; Neogenic, France: Cossmann & Peyrot, **158**; Dall in O'Neill, **188**; Das-Gupta, **191**; Dietrich, **204**; New Zealand: Finlay, **231**, **232**, **233**, **235** & **236**; E. Sardinia: Fossa-Mancini, **239**; Gardner, **259**; Gatuev, **263**; Ihering, von, **350**; Kippiani, **380**; Krause, **386**; Clausiliidae: Lindholm, **419**; Marshall & Murdoch, **435**; Marwick, **436** & **440**; Murdoch, **468**; Nackij, **470**; *Arca*: Oostingh, **500**; Oppenheim, **501**; Powell, **556**; Principi, **566**; *Cypraea*: Schilder, **602**; Schiller, **604**; Steuer, **639**; Trask, **670**; Trechmann, **671**; Wenz, **699**, **701** & **702**; Woodring, **714**; Lough Neagh Clays: Wright, **718**; Yokoyama, **727**, **729** & **730**.

Pliocene.—Boswell, **80**; Bourcart, Aubert de la Rue & Chételat, **83**; Cossmann, **156**; Dall, **183**; Dalloni, **190**; Finlay, **230**; Gardner, **258**; Gregory, **282**; Halavats, **304**; Hanna, **309**; Hanna & Gaylord, **311**; Jekelius, **364**; Makiyama, **429**; Marwick, **437** & **439**; Iceland: Schlesch, **608**; Woodring, **715**; Yokoyama, **728**.

Miocene.—Clark, **132**; Daguin, **181**; Dall, **185**; Desio, **202**; Dollfus & Dautzenberg, **205**; Gardner, **258**; Gomez, **272**; Gripp, **293**; Hanna, **309**; *Cypraea*: Schilder, **603**; Sümeghy, **648**; Thalmann, **653**; Woodring, **715**.

Oligocene.—Clark, **132**; Cooke, **148**; Cox, **164**; Hanna, **309**; Schafarzik, **599**; Viret, **688**.

Eocene.—Abrard, **1**; Cooke, **148**; Cossmann, **155**; Dalloni, **190**; Thibetan fossils: Fossa-Mancini, **238**; Hanna, **309**; Antarctic: Ihering, von, **351**; Kugler, **389**; Lörenthey, **423**; Nagao, **472**; *Ostrea* sp. n.,: Packard, **511**; Palmer, **520**; *Eutrephoceras*: Reeside, **575**; Solá, **620**; Vardabasso, **685**; Wrigley, **719** & **720**; Wrigley & Davis, **721**.

Mesozoic.—Gerth, **265**; Jekelius, **365**.

Cretaceous.—Upper Cretaceous, Turkestan: Arkhanguelski, **29**; Baumberger, **48**; Bertrand & Joleaud, **55**; Beurlen, **57**; Blanchet, **62**; Brown, **92**; Collet, **146**; Cornet, **151** & **152**; Corroy, **154**; Madagascar: Cottreau, **159**; Upper Cretaceous Cephalopoda from Portuguese East Africa: Crick, **172**; Dietrich, **204**; Fucini, **248**; Gaster, **262**; Goranson, **274**; Grabau, **275**, **276**, **277** & **278**; Hallez, **305**; Hanna, **309**; Häntzchell, **312**; Hewitt, **339**; Antarctic: Ihering, von, **351**; Jayet, **361**; Jeannet, **362**; Lehner, **404**; Marshall, **432**; Trinidad: Newton, **479**; Nowak, **483**, **484** & **485**; Packard, **510**; Parona, **522**; Petković, **532**; Rau, **572**; Pacific slope: Reagan, **573**; Sacco, **595** & **596**; Schlosser, **613**; Schiller, **604**; Spath, **623**; Speeton Clay ammonites: Spath, **624**, **626** & **627**; Trechmann, **672**; Trueman, **674**; Twenhofel, **680**; Vinassa de Regny, **687**; Sennonian, New Zealand: Wilckens, **708**; Whitehouse, **704**; *Inoceramus*: Whitehouse, **705**; Whitehouse & Brighton, **706**; *Mortoniceras*: Yabe & Shimizu, **723**; Yehara, **725** & **726**.

Jurassic.—Bertrand & Joleaud, **55**; Beurlen, **57**; Borissiak & Ivanoff, **78**; Buckman in O'Neill, **97**; Cossmann, **157**; Cox, **161**; Frebold, **244**; Goranson, **274**; Tithonic fossils of "Casale di Sopra" (Basambra): Gregorio, de, **280**; Hägg, **302**; Hanna, **309**; Hennig, **332**; Jaworski, **360**; Jeannet, **363**; Krumbeck, **387**; Leuthardt, **405** & **406**; Lewinski, **407**; Moos, **462**; Nalivkin & Akimov, **473**; Nikitin, **482**; Rollier, **587**; Roman, **589**; Rosanof, **590**; Speeton Clay ammonites: Spath, **624**; Strémooukhof, **644**; Thalmann, **654**; Trueman, **674**; Vollrath, **689**; Zatwornitzky, **731**.

Lias and Rhaetic.—Beurlen, **56**; Brinkmann, **90**; Cisneros, de, **127** & **128**; Corroy, **153**; Ernst, **223**; Jaworski, **360**; Kilian & Blanchet, **379**; Toarcian of Italy, ammonites: Palvarino, **521**; Pratjé, **561**; Spath, **628**; Italy: Stefanini, **632**; Trueman, **673**.

Triassic.—Arabu, **26**; Jordan Valley: Cox, **162**; Diener, **203**; Gemmellaro, **264**; Goranson, **274**; Hildebrand, **340**; Jaworski, **360**; König, **385**; Mollusca of Timor: Krumbeck, **388**; Penndorf, **529**; Wagner, **690**.

Palaeozoic.—Frederix, **245**.

Permian.—*Gastrioceras*: Dun & David, **211**; Hayasaka, **313**.

Permo-Carboniferous. — Hayasaka, **314**.

Carboniferous.—Bisat, **58**, **59** & **60**; Demanet, **200**; Garwood & Goodyear, **261**; Jackson, **356**; Lee, **401**; Mitchell, **459**; Pereira de Sousa, **530**; Yanichevsky, **724**.

Devonian.—Branson, **89**; Ehlers & Hussey, **215**; Ferronnière, **229**; Kirchner, **381**; Müller, **467**; Schindewolf, **605**; Thomas, **658**; Wülff, **722**.

Silurian.—Eaton, **214**; Foerste, **237**; Longstaff, **422**; McLearn, **428**; Reed, **574**; Swartz & Prouty, **649**; Walcott, **691**.

Ordovician.—Bekker, **50**; Longstaff, **422**; Reed, **574**; Sardeson, **597**; Savage, **598**; Wilson, **710**.

Cambrian.—Cobbold, **137**; Walcott, **691**.

III.—SYSTEMATIC INDEX.

N.B.—The numerals in Clarendon, where not indicating a Volume, refer to Titles.

Note.—The following arrangement is, as far as possible, after Pelseneer.

General.

Gastropoda, Pallary **516** p. 19.

Mollusca, marine, Mortensen **466**.

Amphineura.

General.

Amphineura, Hammarsten & Runnström **306**.—A., Iredale 382 p. 214.

Polyplacophora.

Acanthochites, Gardiner **257**.—*A.*, *fascicularis*, Prenant **563**.

Acanthochiton bednalli Pils. **var. n.** *johnstoni* W. Australia, Ashby Trans. R. Soc. S. Aust. **47** p. 231.—*A.* (*Notoplax*) *spongialis*, Tasmania; and *A.* (*N.*) *s.* subsp. *glauerti* W. Australia **sp.** and **subsp. n.**, Ashby J. R. Soc. W. Austral. **10** pp. 10–15.—*A.*, *purpuratus* **sp. n.** N. S. Wales, Hull Austral. Zool. Sydney **3** p. 196.—*A.*, Ashby & Hull **35** pp. 83–84.

Acanthopleura spinigera, Ashby **32**.—*A. gemmata*, Ashby **33** p. 230.

Anisoradsia, Iredale & Hull **353** p. 288.

Autochiton, Iredale & Hull **353** pp. 282–284.

Callistochiton with *C. granifer* **sp. n.** Queensland, Hull Austral. Zool. Sydney **3** p. 161.—*C.*, Ashby & Hull **35** p. 83.

Callochiton, Gardiner **257**.

Chaetopleura apiculata, Crozier **174**.

Chiton, Farnie **226**.

Clavarizona **gen. n.** Type *Chiton hirtosus* Bl. Hull Austral. Zool. Sydney **3** p. 199.

Craspedochilus, Gardiner **257**.

Cryptoplax with *C. striatus*, Lk. var. *westernensis* Western Australia; *C. iredalei* S. Australia **var.** and **sp. n.**, Ashby Trans. R. Soc. S. Aust. **47** pp. 237–242.—*C. michaelseni*, Ashby **33**.—*C.*, Ashby & Hull **35** p. 84.

Haploplax, Iredale & Hull **353** pp. 290–296.

Heterozona, Iredale & Hull **353**. pp. 279–281.

Ischnochiton with *I.* (*Haploplax*) *resplendens*, Bed. and Matt. **var. n.** *westernensis* W. Australia, Ashby Trans. R. Soc. S. Aust. **47** pp. 224–226.—*I.* with *I. iredalei kingensis* **subsp. n.** Bass Strait, Ashby & Hull Austral. Zool. Sydney **3** pp. 80–82.—*I. luticolens*, *examinandus* and *e. laetior* **sp.** and

subsp. n. E. Australia, HULL Austral. Zool. Sydney **3** pp. 159–161.—*I.*, HULL **348** p. 195.—*I.*, IREDALE & HULL **353** pp. 228–238, 277.

Ischnoradsia australis divaricata **subsp. n.** S. Queensland, HULL Austral. Zool. Sydney **3** p. 196.—*I. papuaensis*, *I.* (*Haploplax*) *misimaensis* **spp. n.**, Papua, ASHBY Trans. R. Soc. S. Aust. **47** pp. 227–229.—*I.*, ASHBY & HULL **35** p. 83.—*I.*, IREDALE & HULL **353** pp. 288-290.

Lepidopleurus with *L. profundus* **sp. n.** S. Australia, ASHBY Trans. R. Soc. S. Aust. **47** pp. 216–223.—*L. cinereus*, PRENANT **563.**

Liolophura, HULL **348** pp. 197–199.

Lophochiton **gen. n.** with *L. johnstoni* **sp. n.** W. Australia, ASHBY Trans. R. Soc. S. Aust. **47** p. 233.

Lorica paucipustulosa **sp. n.** W. Australia, HULL Austral. Zool. Sydney **3** p. 197.

Loricata, HULL **349.**

Ornithochiton scholvieni, ASHBY **33** p. 230.—*O. subantarcticus*, FINLAY **234** p. 521.

Parachiton puppis **sp. n.** N. S. Wales, HULL Austral. Zool. Sydney **3** p. 158.

Plaxiphora, ASHBY & HULL **35** p. 83. —*P. biramosa*, POWELL **556.**

Rhyssoplax with *R. particolor*, *venusta*, **spp. n.**, Queensland, HULL Austral. Zool. Sydney **3** pp. 162–166.

Sclerochiton with *S. thielei* **sp. n.** W. Australia, ASHBY Trans. R. Soc. S. Aust. **47** pp. 231–233.

Stenochiton with *S. pilsbryanus dilatus* **subsp. n.** W. Australia, IREDALE & HULL Austral. Zool. Sydney **3** pp. 284–288.

Strigichiton **gen. n.** Type *Ischnochiton verconis* Torr, HULL Austral. Zool. Sydney **3** p. 195.—*S.*, IREDALE & HULL **353** pp. 281, 282.

Subterenochiton, IREDALE & HULL **353** p. 277.

Terenochiton with *T. erratus* **sp. n.** W. Australia, HULL Austral. Zool. Sydney **3** p. 159.

Tonicia (*Lucilina*) *delecta*, ASHBY **33** p. 230.

Gastropoda.

STREPTONEURA.

ASPIDOBRANCHIA.

DOCOGLOSSA.

ACMAEIDAE, PATELLIDAE, LEPETIDAE.

Acmaea alticostata Ang. must be used for *A. costata* Sow., TOMLIN Proc. Malac. Soc. **16** p. 98.—*Acmaea testudinalis* **var. n.** *albida* Iceland and *A. t.* **varr. n.** *paucipunctata*, *striata*, *marmorata*, *fusca*, SCHLESCH Naturalist **1924** p. 336.

†*Acmaea ocitatia* **nom. n.** for *Patella subquadrata* Dick. HANNA Proc. Cal. Acad. Sci. **13** p. 156.

Cellana with *C. variegata ariel* **subsp. n.** S. E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 183, 241–243.

†*Helcion*, COSSMANN **157** p. 22.

Lottia costata, Sow. is a syn. of *Patella longicosta* Lam. TOMLIN Proc. Malac. Soc. **16** p. 98.

Naccula **gen. n.** for *Nacella parva* Ang. = *Patelloida punctata* Q. and G., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

Notoacmea with *N. mixta mimula* and *N. flammea diminuta*, **subspp. n.**, S. E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 182, 235.

Parvacmea illibrata mellila **subsp. n.** S. E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 183.

Patella coerulea, ZIRPOLO **735.**—*P. vulgata*, BRAMBELL **87.**—*P.*, FARNIE **226.**—*P.*, IREDALE **352** pp. 238–241.

†*Patella timorensis* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** p. 69 [211].—*P.*, WRIGLEY 719.

Patellanax **gen. n.** for *Patella squamifera* Rve., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 183.

Patelloida with *P. alticostata antelia* and *P. a. complanata*, **subspp. n.**, S. E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 182, 234–236.

Potamacmaea **gen. n.** for *Acmaea fluviatilis*, Blfd., PEILE Proc. Malac. Soc. London **15** 1922 p. 15 [Accidentally omitted from previous records].

Radiacmea with *R. insignis cavilla* **subsp. n.** S. E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 182, 235, 236.

RHIPIDOGLOSSA.

PLEUROTOMARIIDAE, BELLEROPHONTIDAE, HALIOTIDAE, FISSURELLIDAE, COCCULINIDAE.

†*Bembexia globosa* **sp. n.** Ordovician Scotland, LONGSTAFF Q. J. Geol. Soc. **80** p. 416.

†*Bellerophon marylandicum* **sp. n.** Silurian U.S.A., SWARTZ & PROUTY Maryld. Geol. Surv. Silur. Mem. **1923** p. 483.—*B.*, BRANSON **89** pp. 117, 155.—*B.*, DEMANET **200** p. 225.

†*Brochidium timorense* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** p. 58 [200].

†*Bucania*, DEMANET **200** p. 227.

†*Clathrospira*, LONGSTAFF **422** p. 415.

Cosmetalepas **gen. n.** for *Fissurella concatenata* Crse & Fisch., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

Diodora, IREDALE **352** pp. 220, 221.

†*Ditremaria thurmanni* **var. n.** *elongata* Jura. Russia, NELIVKIN Mém. Com. Géol. Petrograd **136** p. 27.

†*Donaldiella pernieri* **sp. n.** Silurian Scotland, LONGSTAFF Q. J. Geol. Soc. **80** p. 426.

†*Eccyliomphalus* with *E. balclatchiensis* Ordovician Scotland; *mullockensis* Silurian Scotland, **spp. n.**, LONGSTAFF Q. J. Geol. Soc. **80** pp. 433–436.

Elegidion **gen. n.** with *E. andax* **sp. n.** S. E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 182, 220.

Emarginula, IREDALE **352** p. 217.

†*Eotomaria convexa, thraivensis, subplana*, **spp. n.**, Ordovician Scotland, LONGSTAFF Q. J. Geol. Soc. **80** pp. 414–415.

†*Euomphalopterus ordovicus* **sp. n.** Ordovician Scotland, LONGSTAFF Q. J. Geol. Soc. **80** p. 438.

†*Euomphalus discoidalis* **sp. n.** Devon. KIRCHNER Verh. physik. Ges. Wurzburg **47** pp. 43–46.—*E.* BRANSON **89** pp. 120, 156.—*E.*, DEMANET **200** p. 229.

†*Euryzone* with *E. mineolaensis* **sp. n.** Devon. Missouri, BRANSON Missouri Bur. Geol. Mines **1922** pp. 118–119.

Gena, IREDALE **352** p. 233.

†*Gosseletina* with *G. minuta* **sp. n.** Trias Sicily, GEMMELLARO Giorn. sc. nat. econ. Palermo **33** pp. 144–146.

Haliotis naevosum improbulum **subsp. n.** S. E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.—*H. tuberculata*, STEPHENSON **638**.—*H.*, HAYNES **315** p. 120.

Hemitoma, IREDALE **352** p. 216.

†*Hormotoma amii* **sp. n.** Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** p. 143.—*H. nigra, H.* (?) *nitida* **spp. n.**, Ordovician Scotland, LONGSTAFF Q. J. Geol. Soc. **80** p. 425.—*H. rowei* and var *nana, H. marylandica, hopkinsi*, **spp.** and **var. n.**, Silurian U.S.A., SWARTZ & PROUTY Maryld. Geol. Surv. Silur. Mem. **1923** pp. 483–485.

†*Kokenella timorensis* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** p. 51 [193].

†*Leptomaria*, COSSMANN **157** p. 19.

†*Lepetopsis* with *L. altus* **sp. n.** Carbon. Belgium, DEMANET Mem. Inst. Geol. Univ. Louvain **2** p. 224.

†*Liospira* with *L. disciformis* **sp. n.** Ordovician Scotland, LONGSTAFF Q. J. Geol. Soc. **80** pp. 410–414.

†*Lophospira* with *L. obliquestriata, shallockensis*, Ordovician Scotland; *L. woodlandi, pteronoides, cancellatula* var. *tenuistriata*, Silurian Scotland; *thraivensis*, Drummuck Group (Starfish Bed), **spp. n.**, LONGSTAFF Q. J. Geol. Soc. **80** pp. 417–421.

Lucapinella, IREDALE **352** p. 219.

Macrochisma, IREDALE **352** p. 219.

Megatebennus, IREDALE **352** p. 218.

†*Mourlonia*, DEMANET **200** p. 227.

†*Murchisonia timorensis, subeuglypha* **spp. n.**, Trias Timor, KRUMBECK Pal. Timor **13** pp. 53 [195]–56 [198].

†*Palliseria* **gen. n.** Euomphalidae with *P. robusta* **sp. n.** Upper Ordovician British Columbia, WILSON Canad. Field Nat. **38** 150.

†*Phanerotrema m'coyi, rugosa*, **spp. n.**, Silurian Scotland, LONGSTAFF Q. J. Geol. Soc. **80** p. 423.

†*Platyschisma*, DEMANET **200** p. 228.

†*Plethospira* (?) *caledoniensis* **sp. n.** Ordovician Scotland, LONGSTAFF Q. J. Geol. Soc. **80** p. 424.

†*Pleurotomaria* (?) *alpenensis* **sp. n.** Devon. Michigan, EHLERS & HUSSEY Paprs. Mich. Acad. Sci. **1** p. 248.—*P. subhaueri, koatensis, praebaucis, P.* (*Worthenia*) *escheri* St. = *solitaria* Ben. var. *timorensis, P.* (*Sisenna*) *turbinata* R. Hoern var. *timorica, P.* (*Sagana*) *nifukokoensis,* **spp.** & **varr. n.** Trias Timor, KRUMBECK Pal. Timor **13** pp. 38 [180]–50 [192].—*P.*, BRANSON **89** pp. 117–118. — *P.*, COSSMANN **157** pp. 20–21.—*P.*, HAYASAKA **314** p. 58.

†*Promourlonia* **subgen. n.** *Mourlonia* with *P. furcata, ambigua,* **spp. n.**, Silurian Scotland, LONGSTAFF Q. J. Geol. Soc. **80** pp. 421–423.

† ?*Pseudomurchisonia sundaica* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** p. 57 [199].

Puncturella eyerdami **sp. n.** Alaska, DALL Nautilus **37** p. 133.—*P.*, IREDALE **352** p. 221.

Rimulanax **gen. n.** for *Puncturella corolla* Verco, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

Rixa **gen. n.** for *Glyphis watsoni* Braz., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

†*Schizostoma*, DEMANET **200** p. 232.

Scissurona **gen. n.** for *Scissurella rosea* Hed. with *Scissurona rosea remota* **subsp. n.** S. E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

Scissurella, IREDALE **352** p. 215.

Scutus, IREDALE **352** p. 216.

Sophismalepas **gen. n.** for *Fissurella nigrita* Sow., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

†*Spirorapha*, BRANSON **89** p. 119.

Stomatella, IREDALE **352** p. 223.

†*Straparollus*, DEMANET **200** p. 229.

Subzeidora **gen. n.** for *Emarginula connectens* Thiele, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

Vacerra **gen. n.** for *Puncturella demissa* Hed. with *V. demissa menda* **subsp. n.** S. E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

†*Waageniella*, DEMANET **200** p. 226.

†*Worthenia*, GEMMELLARO **264** p. 143.

TROCHIDAE, STOMATELLIDAE, ORBITESTELLIDAE, TURBINIDAE, NERITOPSIDAE, NERITIDAE.

†*Adelina voluta, kalickyi,* **spp. n.**, Pleistocene, ANDRUSSOV Mém. Com. Geol. Petrograd **110** pp. 120, 122.

†*Aequispirella* **subgen. n.** Type *Scalaria corulum* Hutt, FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 531.

†*Amphitrochilia*, COSSMANN **157** p. 16.

Astele, IREDALE **352** p. 230.

Astelena **gen. n.** for *Trochus scitulus* A. Ad., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

Astraea, IREDALE **352** p. 232.

†*Ataphrus*, COSSMANN **157** pp. 17, 18.

Ballastraea **gen. n.** for *Astraea fim briata* auct. with *B. kesteveni* **nom. n.** for *A. fimbrata* auct., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

†*Bolania* (*B.*) *rillyensis* **sp. n.** Tertiary WENZ Senckenbergiana **6** p. 222.

†*Brachytrema*, COSSMANN **157** p. 9.

†*Brookula fossilis, iredalei, tenuilirata, funiculata, pukeuriensis, endodonta,* **spp. n.**, Tertiary N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** pp. 527–530.

†*Calliomphalus*, COSSMANN **157** p. 15.

Calliostoma, IREDALE **352** p. 229.

†*Calliostoma obliquistriata* **sp. n.** Tertiary California, TRASK Univ. Cal. Publ. Geol. **13** p. 153.

Calliotrochus, IREDALE **352** p. 226.

Cantharidus, IREDALE **352** p. 225.

†*Chilodontoidea*, COSSMAN **157** p. 16.

Clanculus gatliffi **sp. n.** Coral Sea, TOMLIN Proc. Malac. Soc. **16** p. 24.—*C.*, IREDALE **352** p. 224.

†*Cyclonema parvimedium, haliburtoni,* **spp. n.**, Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** pp. 146–147.

Cyclostrematidae, THIELE **657**.

Ethminolia **gen. n.** with *E. probabilis* **sp. n.** N. S. Wales, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 228.

†*Encyclus boonei* **sp. n.** Jura. France, COSSMANN Mém. Soc. Geol. Min. Bretagne **1** p. 12.

Euchelus, IREDALE **352** p. 230.

Fantor **gen. n.** for *Zizyphinus comptus* A. Ad. IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

Leiopyrga octona problematica **subsp. n.** S. E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

†*Lirularia magna* **sp. n.** Pleistocene California, OLDROYD, T. S., Proc. U. S. Nat. Mus. **65** p. 36.

Lodderena **gen. n.** for *Liotia minima* T. Wds., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

Lodderia, IREDALE **352** p. 233.

†*Margarita* with *M. ornata* **sp. n.** Cretaceous Kansas, TWENHOFEL Bul. State Geol. Surv. Kansas **9** pp. 54–56.

†*Marmolatella*, GEMMELLARO **264** pp. 166–170.

Mesoclanculus **gen. n.** for *Trochus plebejus* Phil., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

Mimelenchus **subgen. n.** for *Phasianella ventricosa* Q. and G., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

Minolia with *M. pulcherrima emendata* **subsp. n.** S. E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 182, 227, 229.

Minopa **gen. n.** for *Fossarina legrandi* Pett., IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 182, 226.

Monilea, IREDALE **352** p. 227.

Monodonta nigerrima, POWELL **556.**

†*Naticopsis* with *N. altispirata, lateaperta*, **spp. n.**, Trias Timor, KRUMBECK Pal. Timor **13** pp. 63 [205]–65 [207].—*N. dannenbergi* **sp. n.** Devon. Germany, WULFF Jahrb. Geol. Landesanst. Berlin **43** p. 62.—*N.*, DEMANET **200** p. 233.—*N.*, GEMMELLARO **264** p. 152.—*N.*, HAYASAKA **314** p. 59.

†*Neozelandia*, Cossm. is a syn. of *Coelotrochus* Fischer, FINLAY Proc. Malac. Soc. **16** p. 99.

Nerita pomahakensis **nom. n.** for *N. nitida* (Hutt) 1873, FINLAY Proc. Malac. Soc. **16** p. 100.—*N.*, BAKER H. B., **41** p. 13.—*N.*, NICODIM **481** p. 27.

†*Nerita ? semipleura* **sp. n.** Cretaceous Kansas, TWENHOFEL Bul. State Geol. Surv. Kansas **9** p. 56.

Neritina, BAKER, H. B., **41** p. 12.—*N.*, PALLARY **519** p. 35.

†*Neritopsis*, COSSMANN **157** pp. 14–15.—*N.*, GEMMELLARO **264** p. 148.—*N.*, WILCKENS **708** p. 542.

Notogibbula **gen. n.** for *Gibbula coxi* Ang. = *Stomatella bicarinata* A. Ads, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

†*Ooliticia*, COSSMANN **157** p. 12.

Phasianella, IREDALE **352** p. 230.

†*Phasianella injumensis* **sp. n.** Jura. Russia, NALIVKIN Mém. Com. Geol. Petrograd **136** pp. 8, 44.

†*Proconulus*, COSSMANN **157** p. 17.

†*Protodolium*, WILCKENS **708** p. 541.

†*Riselloidea*, COSSMANN **157** p. 13.

Salsipotens **gen. n.** for *Trochus armillatus* Wood, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

Smaragdia with *S. mamilla* **sp. n.** Chilka Lake, ANNANDALE Mem. Ind. Mus. **5** p. 859.

Spectamen **gen. n.** for *Trochus philippensis* Wats. IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

Stipator **gen. n.** for *Teinostoma starkeyae* Hed., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

†*Strophostylus allani* **sp. n.** Devon. Missouri, STEWART in BRANSON Missouri Bur. Geol. Mines, **1922** p. 253.

Suavotrochus **sec. n.** type *Solariella lubrica* Dall. 1881, DALL Bul. Biol. Soc. Washington **37** p. 90.

Talopena sublaevis **sp. n.** N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 520.

Tegula pulligo taylori **subsp. n.** Puget Sound, OLDROYD, I. S., Publ. Puget Sd. Biol. St. **4** p. 171.

†*Tegura* (*Chlorostoma*), MAKIYAMA **429** p. 22.

Teinostoma, ANNANDALE **19** p. 858.—*T.*, IREDALE **352** p. 233.

†*Theodoxus cantianus* **sp. n.** Pleistocene England, KENNARD & WOODWARD Proc. Malac. Soc. **16** p. 130.

Trochidae, THIELE 657.

Trochus with *T. mutus* **nom. n.** for *T. nodosus* Hutt. 1885, FINLAY Proc. Malac. Soc. **16** p. 99.

†*Trochus* with *T.* (*Flemingia*) *peracutaeformis*, *T.* (*Turcicula*) *timorensis*, *subtimorensis*, **spp. n.**, Trias Timor, KRUMBECK Pal. Timor **13** p. 59 [201].

Tubiola: *T. microscopica* Nev.= *Cylostrema innocens* Preston, ANNANDALE Mem. Ind. Mus. **5** pp. 856, 858.

Turbinidae, THIELE **657**.

†*Turbo trautscholdi* **sp. n.** Jura. Russia NALIVKIN Mém. Com. Géol. Petrograd **136** pp. 33, 45.

Umbonium, ANNANDALE **19** p. 857.

†*Umbonium suchiense*, *mysticum*, **spp. n.** Tertiary Japan, YOKOYAMA J. Coll. Sci. Tōkyō **45** Art. 2 p. 13.

†*Ziziphinus*, GEMMELLARO **264** p. 147.

HELICINIDAE, PROSERPINIDAE.

Helicina, BAKER, H. B., **41** p. 17.

Lucidella with *L.* (*Lindsleya*?) *venezuelensis* **sp. n.** Venezuela, BAKER, H. B., Occ. Paprs. Mus. Zool. Ann Arbor **137** pp. 21–23.

Oligyra (*Alcadia sericea*) *riparia tachirensis* Venezuela, BAKER, H. B., Occ. Paprs. Mus. Zool. Ann Arbor **137** pp. 13–15.

Proserpina, BAKER, H. B., **41** p. 23.

Stoastomops **gen. n.** with *S. walkeri* **sp. n.** Dutch W. Indies, BAKER, H. B., Nautilus **37** p. 89.

PECTINIBRANCHIA.

TAENIOGLOSSA.

PALUDINIDAE, CICLOPHORIDAE, AMPULLARRIIDAE, LITTORINIDAE, FOSSARIDAE, PLANAXIDAE, CYCLOSTOMATIDAE, VALVATIDAE, RISSOIDAE.

Adelopoma, BAKER, H. B., **41** p. 46.

Ampullaria [*vide etiam Ampullarius*] *interrupta*, ALDERSON **8**.—*A. warnei* ARKELL **28**.—*A.*, PALLARY **519** p. 31.

Ampullarius, [*vide etiam Ampullaria*] LANG **398**.

Anabathron, IREDALE **352** p. 244.

Attenuata, IREDALE **352** p. 244.

Auritus with *A. hoyeri* **sp. n.** Albania, POLIŃSKI Prace Zool. Pol. Panst. Muz. Przyrod. Warsaw **1** pp. 153–165.

Botellus **gen. n.** for *Onoba bassiana* Hed., IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 183, 244.

†*Bovillina* **sec. n.** type *Orygoceras corniculum* Brusina, DALL Bul. Biol. Soc. Washington **37** p. 88.

†*Campeloma clavilithiformis*, *fengtienensis*, *yihsiensis*, *tani*, **spp. n.**, Cretaceous China, GRABAU Bul. Geol. Surv. China **5** pp. 193–196.

Chondropoma, BAKER, H. B. **41** p. 4.

Cistulopsinae **subfam. n.** BAKER, H. B., Nautilus **37** p. 89.

Cleopatra, PALLARY **519** p. 33.

Cochlostoma (*Auritus*) *patulum fontqueri* **subsp. n.** Spain, HAAS Buttl. Inst. Catal. N.H. Barcelona **4** p. 56.—*C.* with *C.* (*Auritus*) *patulum fontqueri* **subsp. n.** Spain, HAAS Arch. Moll. Frankfurt **56** pp. 148–149.

Cyclophorus ceylanicus, WEBER, L. **697**.

Cyclostoma elegans var. *violaceus*, DEAN **197**.—*C. e.*, HESSE **337**.—*C. e.*, PRENNANT **564** p. 367.—*C. e.*, QUAST **568** & **569**.

Cyclotus sieversi Pfr., LINDHOLM **412** p. 315.

Cythna, DALL **183** p. 89.

†*Dardanula* with *D. rivertonensis* **sp. n.** Tertiary N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst **55** p. 491.

Epheriella **gen. n.** with *E. algoidea* **sp. n.** Morocco, PALLARY Expl. sci. Maroc **2** p. 48.

†*Epigrus fossilis* **sp. n.** Tertiary N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 489.

†*Ericia*, GOMEZ **272**.

†*Estea* with *E. polysulcata* **sp. n.** Tertiary N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** pp. 486–487.

†*Eucycloidea*, COSSMANN **157** p. 10.

Fenella virgata (Phil.) = *Litiopa copiosa*, Preston and *L. kempi* Preston, ANNANDALE Mem. Ind. Mus. **5** p. 855. —*F.*, Annandale **19** p. 863.

†*Fossarus barkeri* Anderson **nom. n.** for *F. dalli* And. and Martin, HANNA Proc. Cal. Acad. Sci. **13** p. 165.

†*Haurakia mixta*, *oamarutica*, **spp. n.**, Tertiary N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 482.

†*Holopea* with *H. caecistriata* **sp. n.** Silurian Nova Scotia, McLearn Geol. Surv. Canada **137** pp. 147–148.—*H.* (?) *flintstonensis* **sp. n.** Silurian U.S.A., Swartz & Prouty Maryld. Geol. Surv. Silur. Mem. **1923** p. 486.

†*Ibicicornu* **sec. n.** Type *Orygoceras fistula* Brusina, Dall Bull. Biol. Soc. Washington **37** p. 88.

†*Incilicornu* **sec. n.** Type *Orygoceras leptonema* Brusina, Dall Bul. Biol. Soc. Washington **37** p. 88.

Kobeltocochlea pumila **sp. n.** Lake Baikal, Lidnholm Arch. Moll. Frankfurt **56** p. 217.

Lacuna, Strong **646.**

Laevilitorina micra, cystophora, **spp. n.**, N. Zealand, Finlay Trans. Proc. N. Zeal. Inst. **55** pp. 522–523.

Lanistes, Pallary **519** p. 32.

Lecythoconcha with *L. lecythis* form *crassior* **nom. n.** for *Viripara* [*chinensis* (?) var.] *compacta* Kob., Annandale J. Asiat. Soc. Beng. **19** pp. 411–416.

†*Linemera* **gen. n.** with *L. minuta, pakeuriensis, awamoaensis,* **spp. n.**, Tertiary N. Zealand, Finlay Trans. Proc. N. Zeal. Inst. **55** pp. 483–485.

Lironoba, Iredale **352** p. 244.

†*Lironoba polyvincta, charassa,* **spp. n.**, Tertiary N. Zealand, Finlay Trans. Proc. Z. Zeal. Inst. **55** pp. 485–486.

Littorina radis, Butterfield **101.**—*L. r.*, Prennant **564** p. 362.—*L.*, Bavay 49.—*L.*, Miller, H. M., **456.**

Margarya, Annandale **17** p. 411.

†*Notosetia* with *N. prisca* and subsp. *paroeca* **sp.** and **subsp. n.** Tertiary N. Zealand, Finlay Trans. Proc. N. Zeal. Inst. **55** p. 488.

†*Nozeba candida* and var. *effusa* **sp.** and **var. n.** Tertiary N. Zealand, Finlay Trans. Proc. N. Zeal. Inst. **55** pp. 490–491.

†*Omospira* (?) *depressa* **sp. n.** Ordovician Scotland, Longstaff Q. J. Geol. Soc. **80** p. 427.

Omphalotropis japonica takanoshimana, j. polita, strictus tanegashimae, **subspp. n.**, Japan, Pilsbry Proc. Acad. Nat. Sci. Philad. **76** p. 13.

†*Orygoceras*, Dall **183** & **185.**

Paludina [*Vide etiam Vivipara and Viviparus*] *vivipara*, Andersen **12** & **13.**—*P. v.*, Prennant 564 p. 362.—*P. balthica*, Woodward **716.**

†*Paludina*, Bogatchev **71** pp. 198–208.

Hydrobioides with *Parafossarulus* **gen. n.** type *Paludina* (*Bithynia*) *striatula* Bens., Annandale in Annandale & Prashad Proc. Malac. Soc. **16** pp. 28–29.

Plesiotrochus, Iredale **352** p. 246.

Poteria with *P. translucida bejumensis* and *t. santaguitensis, glaucostoma aulari, dunkeri cardozi,* **subspp. n.** Venezuela, Baker H. B. Occ. Paprs. Mus. Zool. Ann Arbor **137** pp. 31–46.

Ptychopoma, Annandale **16** p. 396.

†*Purpurina* with *P. couffoni* **sp. n.** Jura. France, Cossmann Mem. Soc. Geol. Min. Bretagne **1** pp. 10–11.

†*Rissoa*, Finlay **232** p. 491.

Rissoidae, Dall **184.**

Rissoina, Iredale **352** p. 245.

†*Rissoina* with *R. perplexa* **sp. n.** Tertiary N. Zealand, Finlay Trans. Proc. N. Zeal. Inst. **55** p. 489.

Tectarius, Iredale **352** p. 243.

Tudora maculata, rupis, muskusi, pilsbryi, fossor, **spp. n.**, Curaçoa, Baker, H. B., Nautilus **37** pp. 92–94.—*T.* with *T. williamsoni* and *T. w. secana* **sp.** and **subsp. n.** Venezeula, Baker, H. B., Occ. Paprs. Mus. Zool. Ann Arbor **137** pp. 2, 23–27.

†*Tudorella*, Wenz **700.**

†*Turbella elegans* **sp. n.** Eocene California, Palmer Univ. Cal. Pub. Zool. **14** p. 299.

Valvata brandti West., Lindholm **412** p. 315.—*V. piscinalis* f. *alpestris* Annandale **18.**—*V. p.*, Steusloff **641.**—*V.*, Hanna **310** p. 135.—*V.*, Henderson **331** p. 193.—*V.*, Lindholm **416.**—*V.*, Pallary **518** p. 217 and **519** p. 35.

†*Valvata suturalis* **sp. n.** Cretaceous China, Grabau Bul. Geol. Surv. China **5** p. 161.

Vivipara [*Vide etiam Paludina* and *Viviparus*], ANNANDALE **17** p. 407.—*V.*, CAZIOT **119**.—*V.*, PALLARY **519** p. 32.

Viviparidae, ANNANDALE **20**.—V., ANNANDALE in ANNANDALE & PRASHAD **22**.

Viviparus [*Vide etiam Paludina* and *Vivipara*] *viviparus*, ANKEL **15**.

LITIOPIDAE, ADEORBIIDAE, JEFFREYSIIDAE, SKENEIDAE, ASSIMINEIDAE, TRUNCATELLIDAE.

Blanfordia integra **sp. n.** Japan, PILSBRY Proc. Acad. Nat. Hist. Philad. **76** p. 12.

†*Circulus*, FINLAY **230**.

Elachorbis diaphana **sp. n.** N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 518.

†*Elachorbis*, FINLAY **230**.

Heterorissoa, IREDALE **352** p. 245.

†*Litiopa sulculosa*, WRIGLEY **719**.

Tatea hedleyi **sp. n.** New Zealand, BROOKES Trans. Proc. N. Zeal. Inst. **55** p. 153.

Truncatella, HENDERSON **331** p. 194.

HYDROBIIDAE, TIARIDAE, PLEUROCERIDAE, PSEUDOMELANIIDAE, NERINEIDAE, CERITHIIDAE, VERMETIDAE.

Amnicola, BRUES **96** p. 418.—*A.*, HENDERSON **331** p. 190.

†*Amnicola* (*A.*) *floridana convexior* **nom. n.** for *A. f. convexa* Dall 1892 *non A. c.* Sandb. 1874, WENZ Senckenbergiana **6** pp. 221–222.

†*Ataxocerithium pyramidale* and subsp. *robustum*, *A. nodicingulatum*, **spp.** and **subsp. n.**, Tertiary. N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** pp. 475–476.—*A. tricingulatum*, *suteri*, **spp. n.**, Pliocene N. Zealand, MARWICK Trans. Proc. N. Zeal. Inst. **55** pp. 194–195.

Baicalia (*Teratobaicalia*) *macrostoma* **form. n.** *lyogyra*, *B.* (*B.*) *angerensis* **form. n.** *semicostulata*, *herdenana* **subsp. n.** *profunda*, *B.* (*Pseudobaicalia*) *contabulata* **subsp. n.** *semilevis*, *B.* (*Maackia*) *costata*, **subspp. n.**, *eximia* and *exigua*, *B.* (*Trichiobaicalia*) *duthiersi* **subsp. n.** *pachypleura* Lake Baikal, LINDHOLM C.R. Acad. Sci. Russie **1924** pp. 22–24.

Baicaliidae, LINDHOLM **416**.

Benedictia fragilis **subsp. n.** *distinguenda* Lake Baikal, LINDHOLM C.R. Acad. Sci. Russie **1924** p. 22.—*B.*, LINDHOLM **416**.

†*Bezanconia woodsi* **sp. n.** Tertiary Jamaica, TRECHMANN Geol. Mag. **61** p. 13.

Bittinella **subgen. n.** type *Bittium hiloense* Pils. and Van., DALL Bul. Biol. Soc. Washington **37** p. 89.

†*Bithinia* [*Vide etiam Bythinia*] *mengyinense* **sp. n.** Cretaceous China, GRABAU Bul. Geol. Surv. China **5** p. 160.

Bittium, IREDALE **352** p. 246.—*B.*, MILLER, H. M. **456**.

†*Bittium* (*Semibittium*) *quadricingulatum* **sp. n.** Eocene California, PALMER Univ. Cal. Pub. Zool. **14** p. 294.

Buliminus goebeli West. and *Bythinia meneghiniana* Issel = *Micromelania caspia* Eichw., LINDHOLM Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** pp. 307–308.

Bythinela [*Bithynella*], NICODIM **481** p. 27.

†*Bythinella deshayesi* **nom. n.** for *Paludina pygmaea* Desh., WENZ Senckenbergiana **6** p. 222.

Bythinia [*Vide etiam Bithinia*] *moltschenovi* **sp. n.** Delta of Amu Darya, LINDHOLM Bul. Acad. Sci. Russ. **8** p. 186.—*Bythinia tentaculata*, ANKEL **15**.—*B.*, NICODIM **481** p. 27.—*B.*, PALLARY **518** p. 214.

Cacozelia **gen. n.** for *Cerithium lacertinum* Gld., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 183.

Cerithidea tricarinata, FINLAY **230**.

†*Cerithidea*, MARWICK **439** p. 194.

†Cerithidae, CHARPIAT **121**.

Cerithiopsidae, DALL **184**.

†*Cerithiopsis* with *C. preussi* **nom. n.** for *C. oregonensis* Dick., HANNA Proc. Cal. Acad. Sci. **13** p. 161.

†*Cerithium* with *C. baculum* **sp. n.** Tertiary Japan, YOKOYAMA Japan J. Geol. Geogr. **2** p. 52.—*C.* ? *teslaensis* **nom. n.** for *C. brauneri* Hall and Ambrose, HANNA Proc. Cal. Acad. Sci. **13** p. 162.—? *Cerithium with C.* ? *suciaensis* **sp. n.** Cretaceous California, PACKARD Univ. Cal. Publ. Geol. **13** p. 430.

Ceritoturris **subgen. n.** type *Crassispira ? bittium* **sp. n.** Hawaiian Isds., DALL Bul. Biol. Soc. Washington **37** p. 88.

†*Clessinia subvariabilis, striata, major* **spp. n.**, Pleistocene, ANDRUSSOV Mém. Com. Géol. Petrograd **110** pp. 138–141.

†*Cryptaulax*, COSSMANN **157** p. 8.

Delavaya, ANNANDALE **17** p. 404.

Delavayidae **fam. n.**, ANNANDALE J. Asiat. Soc. Beng. **19** p. 403.

†*Emmericia*, BOGATCHEV **71** pp. 208, 209.

Fenonilia, ANNANDALE **17** p. 406.

Fluminicola, HENDERSON **331** p. 191.

Goniobasis with *G. clenchi* **sp. n.** Alabama, GOODRICH Nautilus **38** pp. 43, 45–48.—*G.*, HENDERSON **331** p. 189.

†*Goniobasis borealis* **sp. n.** Tertiary Arctic Canada, DALL in O'NEILL Rep. Canad. Arct. Exp. 1913–18 **11** p. 27A.

Hemisinus, NICODIM **481** p. 25.

†*Hydrobia pisana* **nom. n.** for *Littorinella obtusa* Cap. 1880, WENZ Senckenbergiana **6** p. 222.—H., WENZ **701**.

Hydrobioides, ANNANDALE **17** p. 402.

Idiopyrgus walkeri **sp. n.** Brazil, PILSBRY Proc. Acad. Nat. Sci. Philad. **76** p. 59.

Katayama nesophora and *formosana*, FAUST **227**.

†*Katosira obliquestriata* **sp. n.** ? Cretaceous N. Zealand, TRUEMAN Trans. Proc. N. Zeal. Inst. **55** pp. 601–604.

Litharium **subgen. n.** type *Triphora oceanida* DALL **sp. n.** Hawaiian Isds. DALL Bul. Biol. Soc. Washington **37** p. 89.

Lithoglyphus with *L. taliensis* **sp. n.** China, ANNANDALE J. Asiat. Soc. Beng. **19** p. 401.—*L.*, REMY **577** & **578**.

†*Lithoglyphus*, BOGATCHEV **71** pp. 214–215.—*L.*, REMY **578**.

Littoridina with *L.* (*Haleobia*) *berryi, ortoni*, **spp. n.**, Lake Titicaca, PILSBRY Proc. Acad. Nat. Sci. Philad. **76** pp. 51–53.

†*Loxonema* with ? *L. variscoiformis, L.* (*Anaptychia*) *nifukokoensis, L.* (*Heterocosmia*) *subinsignis, L.* (? *H.*) *timorensis*, **spp. n.**, Trias Timor, KRUMBECK Pal. Timor **13** pp. 74 [216]–81 [223].—*L.*, DEMANET **200** p. 237.—*L.*, GEMMELLARO **264** p. 174.

†*Macrochilina*, DEMANET **200** p. 238. —*M.* (*Rama*), GEMMELLARO **264** p. 194.

Melanellidae, DALL **184**.

Melania, PALLARY **518** p. 216 & **519** p. 34.

Melanoides enomotoi **sp. n.** Philippines, PILSBRY Proc. Acad. Nat. Sci. Philad. **76** p. 16.—*M.*, CAWSTON **113**.

Melanopsis, PALLARY **513**.

†*Melanopsis*, BOGATCHEV **71** pp. 212–214.—*M.*, WENZ **700**.

†*Micromelania subcaspia* **sp. n.**, Pleistocene ANDRUSSOV Mém. Com. Géol. Petrograd **110** p. 124.

†*Morgania mariensis* **sp. n.** Tertiary Jamaica, TRECHMANN Geol. Mag. **61** p. 13.

Oncomelania hupensis, FAUST **227**.

†*Pachymelania* White, HANNA **309** p. 175.

Paludestrina truncata **sp. n.** Maryland VANATTA Proc. Acad. Nat. Sci. Philad. **76** p. 26.—*Paludestrina jenkinsi*, CRAPPER **170**.—*P. j.*, GRENSTED **286**.—*Paludestrina ventrosa* (Mont.), KENNARD & WOODWARD **378** p. 128.—*Paludestrina ulvae*, QUICK **570**.—*P.*, HENDERSON **331** p. 190.

Paludomus, ANNANDALE & CHOPRA **21** p. 33.

Paraprososthenia, ANNANDALE **17** p. 406.

Parapyrgula, ANNANDALE **17** p. 405.

Pleurocera, GOODRICH **273** p. 44.—*P.*, HENDERSON **331** p. 189.

Pomatiopsis, HENDERSON **331** p. 192.

Potamides, ANNANDALE **19** p. 866.

†*Potamides* (*Cerithidea*) *madagascariensis* **sp. n.** Cretaceous Madagascar, COTTREAU Ann. paléont. Paris **11** p. 171.

Potamolithus fodinarum **sp. n.** Brazil, PILSBRY Proc. Acad. Nat. Sci. Philad. **76** p. 60.

†*Procerithium*, COSSMANN **157** pp. 7–8.

†*Promathildia timorensis* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** p. **86** [228].

†*Protorcula* with *P. schopeni* **sp. n.** Trias Sicily, GEMMELLARO Giorn. sc. nat. econ. Palermo **33** pp. 195–198.

†*Prososthenia*, BOGATCHEV **71** p. 210.

Pseudamnicola, PALLARY **519** p. 34.

†*Pseudomelania* with *P.* (*Oonia*) *boonei*, *P.* (*Microschiza*) *dimorphospira* **spp. n.** Jura. France, COSSMANN Mém. Soc. Geol. Min. Bretagne **1** pp. 3–5.

†*Pyrazus matleyi* **sp. n.** Tertiary Jamaica, TRECHMANN Geol. Mag. **61** p. 14.

†*Rhabdostropha primitiva*, *R.* (*?*) *latisinuata* **spp. n.** Ordovician Scotland, LONGSTAFF Q. J. Geol. Soc. **80** p. 428.

†*Rhychocerithium*, COSSMANN **157** p. 9.

Sabinea ulvae (Penn.), KENNARD & WOODWARD **378** p. 128.

Seila, IREDALE **352** p. 246.

Seilarex **gen. n.** for *Seila attenuata* Hed., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 183.

Semisulcospira with *S. dolichostoma* **sp. n.** China & *S. libertina* **nom. n.** for *Melania l.* Kob. & *S. cancellata* **nom. n.** for *M. c.* Bens., ANNANDALE IN ANNANDALE & PRASHAD Proc. Malac. Soc. **16** pp. 30–33.

Somatogyrus, HENDERSON **331** p. 192.

Stenothyra : S. minima (Sow.) = *S. blanfordiana* Nev. *S. chilkaensis*, *orissaensis*, *obesula* & *trigona* Preston, ANNANDALE Mem. Ind. Mus. **5** pp. 855–862.

†*Stenothyra sandbergeri* **nom. n.** for *Nematura* sp. Sandb. 1873, WENZ Senckenbergiana **6** p. 223.

Strobiligera **subgen. n.** type *Triphora* (*inflata* var.) *ibex* Dall, DALL Bul. Biol. Soc. Washington **37** p. 89.

Telescopium, ANNANDALE **19** p. 865.

†*Terebrella*, COSSMANN **157** p. 8.

Tricula, ANNANDALE **17** p. 403.

Triphoridae, DALL **184.**

†*Tryonia*, DALL **185.**

Turbo stagnalis Baster, KENNARD & WOODWARD **378** p. 128.

CAECIDAE, TURRITELLIDAE, STRUTHIOLARIIDAE, CHENOPIDAE, STROMBIDAE, XENOPHORIDAE.

†*Alaria nodosa* **sp. n.** Cretaceous California, PACKARD Univ. Cal. Publ. Geol. **13** p. 430.

†*Aporrhais vetus* **sp. n.** Cretaceous California, PACKARD Univ. Cal. Publ. Geol. **13** p. 431.—*A. sowerbii*, WRIGLEY **719.**

†*Arrhoges boulei* **sp. n.** Cretaceous Madagascar, COTTREAU Ann. paléont. Paris **11** p. 172.—*A.*, WILCKENS **708** p. 541.

Caecum (*Meioceras*) *lermondi* **sp. n.** Florida, DALL Nautilus **38** p. 7.

†*Clisospira balclatchiensis*, *reticulata* **spp. n.** Ordovician Scotland, LONGSTAFF Q. J. Geol. Soc. **80** pp. 439–440.

Colpospira with *C. guillaumei* **sp. n.** N.S. Wales, IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 248–249.

†*Dicroloma*, COSSMANN **157** p. 1.

†*Diempterus*, COSSMANN **157** p. 2.

Gazameda **gen. n.** for *Turritella gunnii* Rve., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 183.

Glyptozaria **gen. n.** for *Turritella opulenta* Hed., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 183.

†*Monalaria* **gen. n.** Struthiolariidae MARWICK Trans. Proc. N. Zeal. Inst. **55** pp. 162 163 173.

†*Orthaulax* with *O. japonicus* **sp. n.** Palaeogene Japan, NAGAO Japan J. Geol. Geogr. **3** pp. 13–18.

†*Perissoptera*, WILCKENS **708** p. 541.

†*Promathildia*, COSSMANN **157** pp. 6 7.

†*Pseudalaria*, COSSMANN **157** p. 9.

†*Spinigera*, COSSMANN **157** p. 3.

Struthiolaria, IREDALE **352** p. 252.—*S.*, MARWICK **438.**

†*Struthiolaria* with *S. subspinosa*, *spinifera*, *erata*, *callosa*, *fortis*, *armata*, *media*, *convexa*, *fossa*, *rugosa* **spp. n.** Tertiary New Zealand, MARWICK Trans. Proc. N. Zeal. Inst. **55** pp. 166–169 174–189.—*S. frazeri*, MARWICK **436.**

†*Struthiolarella*, MARWICK **438.**

Struthiolariopsis, MARWICK **438.**

Turritella albolapis **nom. n.** for *T. concava* Hutt 1877, FINLAY Proc. Malac. Soc. **16** p. 101.—*T.*, IREDALE **352** pp. 247–248 250.

†*Turritella kiiensis* **sp. n.** Tertiary Japan, YOKOYAMA Japan J. Geol. Geogr. **2** p. 52.—*T. perterebra* **sp. n.** Tertiary Japan, YOKOYAMA J. Coll. Sci. Tōkyō **45** Art. 2 p. 11.—*T. polynominata* **nom. n.** for *T. conica* Weaver; *T. secordia* **nom. n.** for *T. tricarinata* Burwash, HANNA Proc. Cal. Acad. Sci. **13** pp. 184–185.—*T. tokunagai, importuna* **spp. n.** Tertiary Japan, YAKOYAMA J. Coll. Sci. Tōkyō **45** Art. 3 p. 10.—*T. saishuensis* **sp. n.** Upper Pliocene Japan, YOKOYAMA J. Coll. Sci. Tōkyō **44** Art. 7 p. 3.—*T.*, REAGAN **573** p. 183.

Tylospira, MARWICK **438.**

CAPULIDAE, HIPPONYCIDAE, CALYPTRAEIDAE, NARICIDAE, NATICIDAE, LAMELLARIIDAE.

†*Amauropsella* with *A. teres* **sp. n.** Tertiary N. Zealand, MARWICK Trans. Proc. N. Zeal. Inst. **55** pp. 576–577.

†*Amauropsis pseudoalveata* **sp. n.** Cretaceous California, PACKARD Univ. Cal. Publ. Geol. **13** p. 429.

Capulella **gen. n.** type *C. microceras* **sp. n.** Hawaiian Isds., DALL Bul. Biol. Soc. Washington **37** p. 89.

Capulus, IREDALE **352** p. 245.

†*Capulus*, DEMANET **200** p. 234.

†*Carinacca* **subgen. n.** Naticidae, MARWICK Trans. Proc. N. Zeal. Inst. **55** p. 553.

Crepidula wilckensi **nom. n.** for *C. incurva* Zitt. 1865, FINLAY Proc. Malac. Soc **16** p. 101.—*C. fornicata*, BELCHER **51.**—*C. f.*, ORTON **507.**

†*Crepidula auricula* **sp. n.** Tertiary Japan, YAKOYAMA J. Coll. Sci. Tōkyō **45** Art. 3 p. 11.—*C. radiata*, POWELL **556.**

†*Diaphorostoma cornutum* **var. n.** *arisaigensis* Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** p. 148.—*D.* with *D. genevievensis* **sp. n.** Devon. Missouri, BRANSON Missouri Bur. Geol. Mines **1922** pp. 113 156.—*D.*, STEWART in BRANSON **89** p. 261.—*D.*, TANSEY in BRANSON **89** p. 207.

†*Dicosmos*, GEMMELLARO **264** pp. 156–165.

†*Globisinum* **gen. n.** Naticidae, MARWICK Trans. Proc. N. Zeal. Inst. **55.** p. 574.

†*Gyrodes californica* **sp. n.** Cretaceous California, PACKARD Univ. Cal. Publ. Geol. **13** p. 429.—*G. insecuris* **nom. n.** for *Natica* (*G.*) *lineata* Dick.; *G. negligentus* **nom. n.** for *N.* (*G.*) *alveata* Con., HANNA Proc. Cal. Acad. Sci. **13** p. 168.—*G. pansus* Stol. var. *madagascariensis* **var. n.** Cretaceous Madagascar, COTTREAU Ann. paléont, Paris **11** p. 164.

Heliconatica **sec. n.** type *Eunaticina margaritaeformis* **sp. n.** Hawaiian Isds., DALL Bul Biol. Soc. Washington **37** p. 90.

Hipponyx radiatus is a syn. of *Crepidula radiata*, FINLAY Proc. Malac. Soc. **16** p. 100.

†*Hipponyx antiquatus*, POWELL **556.**

†*Hologyra*, GEMMELLARO **264** p. 171.

Lippistes, IREDALE **352** p. 251.

†*Magnatica* **subgen. n.** Naticidae, MARWICK Trans. Proc. N. Zeal. Inst. **55** p. 553.

†*Micreschara* (*Macromphalina*) *auriformis* **sp. n.** *M.* (*M.*) *buttoni* **nom. mut.** for *Sigaretus carinatus* Hutt. Tertiary N. Zealand, MARWICK Trans. Proc. N. Zeal. Inst. **55** p. 578.

Naricava, IREDALE **352** p. 252.

†*Naricopsina*, COSSMANN **157** p. 14.

Natica with *N. haweraensis, denticulifera*, **spp. n.**, New Zealand, MARWICK Trans. Proc. N. Zeal. Inst. 55 pp. 551 552.—*N. kingensis* **sp. n.** King Isd., Tasmania, MAY Paprs. Proc. R. Soc. Tasmania **1923** p. 49.—*N. maoria* **nom. n.** for *N. australis* (Hutt) 1878, FINLAY Proc. Malac. Soc. **16** p. 101.—*N.*, IREDALE **352** p. 254.

†"*Natica andersoni*," CLARK; *N. fiasco* **nom. n.** for *Neverita globosa* Gabb., HANNA Proc. Cal. Acad. Sci. **13** p. 173.—*N.* with *N. bacca, planisuturalis, sublata, harrisensis, denticulifera, maesta, N.* (*Carinacca*) *haasti, allani, N.* (*Magnatica*) *sutherlandi*, **spp. n.**, *N.* (*M.*) *suteri* **nom. mut.** *for Polinices planispirus* Suter, *N.* (*M.*) *nuda* **sp. n.** Tertiary N. Zealand, MARWICK Trans. Proc. N.

Zeal. Inst. **55** pp. 549–556.—*N.* with ? *N. koatensis* **sp. n.** *N.* (*Amauropsis*) *paludinaris* Münst. ? mut. *major* ? **mut. n.** Trias Timor, KRUMBECK Pal. Timor **13** pp. 70 [212] 71 [213].—*N.* with *N. mariensis* **sp. n.** Tertiary Jamaica TRECHMANN Geol. Mag. **61** pp. 11, 12.—*N. notocenica, consortis, praeconsors, inexpectata,* **spp. n.,** Tertiary N. Zealand FINLAY Trans. Proc. N. Zeal. Inst. **55** pp. 450–452.—*N.* ? *smolanense* **sp. n.** Cretaceous Kansas, TWENHOFEL Bul. State Geol. Surv. Kansas **9** p. 56.—*N.*, COX **162** p. 86 .—*N.*, MAKIYAMA **429** p. 20.—*N.*, PALMER **520** p. 296.

†*Naticella* with *N. planicosta* **sp. n.** Trias Sicily, GEMMELLARO Giorn. sc. nat. econ. Palermo **33** pp. 149–151.—*N. praesublineata* and var. *altispirata* **sp.** and **var. n.** Trias Timor, KRUMBECK Pal. Timor **13** pp. 67 [209]–68 [210].

†*Orthonychia clarki* **sp. n.** Silurian U.S.A., SWARTZ & PROUTY Maryld. Geol. Surv. Silur. Mem. **1923** p. 488.—*O.* with *O. praeconicum* **sp. n.** Devon. Missouri, STEWART in BRANSON Missouri Bur. Geol. Mines **1922** pp. 254–255.

†*Pictavia*, COSSMANN **157** p. 14.

†*Platyceras* with *P. annulatum* **sp. n.** Devon. Missouri, BRANSON Missouri Bur. Geol. Mines **1922** pp. 120–122 156.—*P.* with *P. depressum, elongatum* var. *parvum, peregrinus, planovolvis,* **spp.** and **var. n.,** Devon. Missouri, STEWART in BRANSON Missouri Bur. Geol. Mines **1922** pp. 255–261.—*P. inoptatum* **sp. n.** Devon. Iowa, THOMAS Iowa Geol. Surv. **29** p. 451 (footnote).—*P.* with *P. paucispirale* **sp. n.** Silurian U.S.A., SWARTZ & PROUTY Maryld. Geol. Surv. Silur. Mem. **1923** p. 489.—*P.*, TANSEY in BRANSON **89** p. 207.

Polinices intracrassus **nom. n.** for *P. callosus* (Hutt) 1873, FINLAY Proc. Malac. Soc. **16** p. 101.

†*Polinices pseudovitreus* **sp. n.** Tertiary N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 152.

Propesinum **gen. n.** for *Natica umbilicata* Q. and G. with *P. u. minusculum* and *P.* (*u.*) *mimicum,* **subspp. n.,** S.E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 183.

Sigapatella terraenovae **sp. n.** New Zealand, PEILE Proc. Malac. Soc. **16** p. 21.

†*Sigaretus ineptus* **sp. n.** Tertiary Japan, YOKOYAMA Japan. J. Geol. Geogr. **2** p. 53.

Sinum, IREDALE **352** pp. 254–255.—*S.* (*Eunaticina*), MARWICK **440** p. 572.

†*Sinum* with *S. infirmum* **sp. n.** Tertiary N. Zealand, MARWICK Trans. Proc. N. Zeal. Inst. **55** p. 572.—*S.* (*Sigaretus*) *trigenarium* **sp. n.** Tertiary California, TRASK Univ. Cal. Publ. Geol. **13** p. 153.

Stiva royana **sp. n.** S.E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 245.

†*Sulconacca* **gen. n.** Naticidae with *S. prisca, compressa, vaughani,* **spp. n.** Tertiary N. Zealand, MARWICK Trans. Proc. N. Zeal. Inst. **55** pp. 556–558.

Uber with *U. labyrintheum, mellosum* **spp. n.,** Queensland, HEDLEY Rec. Austr. Mus. **14** pp. 154–162.—*U. pateaensis,* **sp. n.** *Euspira* **subgen. n.** with *U.* (*E.*) *barrierensis* **sp. n.** N. Zealand, MARWICK Trans. Proc. N. Zeal. Inst. **55** pp. 564, 571.

†*Uber* with *U. mucronatus, unisulcatus, waipaensis, lobatus, chattonensis, propeovatus, waipipiensis, ovuloides, finlayi, semisculus, Kaawaensis, esdailei, incertus, modestus, obstructus, scalptus,* **spp. n.,** *Euspira* **subgen. n.** with *U.* (*E.*) *fyfei, firmus, lateapertus, pukeuriensis, U.* (*Neverita*) *pontis,* **spp. n.,** Tertiary N. Zealand, MARWICK Trans. Proc. N. Zeal. Inst. **55** pp. 559–571.

TRICHOTROPIDAE, JANTHINIDAE, CYPRAEIDAE, CYMATIDAE, CASSIDIDAE, TONNIDAE.

†*Acampthochetus*, COSSMANN & PEYROT **158** pp. 265, 299–301.

Alcithoe arabica jaculoides **subsp. n.** New Zealand, POWELL Proc. Malac. Soc. **16** p. 108.

†*Apollon* with *A. pelonatensis, inaequicrenatus, lessonae* var. *occidentalis,* **spp.** and **var. n.** Neogenic France, COSSMANN & PEYROT Actes soc. linn. Bordeaux **75** pp. 265, 305–319.

†*Argobuccinum*, FINLAY **231** p. 462.

Austrotriton with *A.* (*parkinsonius*) *basilicus* **sp. n.** S.E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 183, 253.—*A. parkinsonianus*, POWELL **556**,

†*Austrotriton* with *A. maorium* and var. *insignitum*, *A. cyphoides*, **spp.** and **var. n.** Tertiary N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** pp. 153–155.

†*Cassidaria diadema*, WRIGLEY **719.**

Cassidea stadialis, FINLAY **234** p. 525.

†*Cassidea multisecta* **nom. n.** for *Cassis striatus* Hutt **1873**, FINLAY Proc. Malac. Soc. **16** p. 101.—*C.*, COSSMANN & PEYROT 158 p. 71.

Cassididae, DALL **184.**

†*Charonia* with *C. clifdenensis* **sp. n.** Tertiary N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** pp. 460, 461.

†*Colubraria*, COSSMANN & PEYROT **158** pp. 264, 295.

Craspedotriton, IREDALE **352** p. 271.

Cymatiella **gen. n.** for *Triton quoyi* Rve., IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 183, 253.

Cymatidae, DALL **184.**

Cymatium, IREDALE **352** p. 253.—*C.*, *exaratum* POWELL **556.**

†*Cymatium* with *C. revolutum*, *marwicki*, *kaiparaense*, *sculpturatum*, *octoserratum decagonium*, **spp. n.**, Tertiary N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** pp. 456–460, 462.

Cypraea, IREDALE **352** pp. 256–257. —*C. tigris*, MEER MOHR **452.**

†*Cypraea hieroglyphica*, *phyletica*, *graciliplicata*, **spp. n.**, Miocene, SCHILDER Senckenbergiana **5** pp. 100–107.—*C.*, SCHILDER, **602.**

†*Cypraeicassis*, COSSMAN & PEYROT **158** p. 87.

Cypraeidae, SCHILDER **600** & **601.**

†*Erato* with *E. senectus* **sp. n.** Tertiary N. Zealand, MURDOCH Trans. Proc. N. Zeal. Inst. **55** p. 160.

†*Eutritonium* (*Sassia*) *praegranosum* **sp. n.** Cretaceous Madagascar, COTTREAU Ann. paléont. Paris **11** p. 174.

†*Ficopsis furlongi* **sp. n.** Eocene California, PALMER Univ. Cal. Pub. Zool. **14** p. 295.

†*Galeodea tuberculiformis* **nom. n.** for *Morio* (*Sconsia*) *tuberculatus* Gabb., HANNA Proc. Cal. Acad. Sci. **13** p. 167.

Galfridus **gen. n.** for *Triton speciosus* Ang., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 183.

Gyrinella **sec. n.** type *Gyrineum pusillum* Brod., DALL Bull. Biol. Soc. Washington **37** p. 89.

†*Hilda* with *H. sacyi* **sp.n.** Neogenic France, COSSMANN & PEYROT Actes soc. linn. Bordeaux **75** pp. 265 297.

Iphinopsis **sec. n.** *Trichotropis* type *Ipinoë kelseyi* Dall 1908, DALL Bul. Biol. Soc. Washington **37** p. 88.

†*Oniscia*, COSSMANN & PEYROT **158** p. 90.

†*Persona*, COSSMANN & PEYROT **158** pp. 264 296.

Phalium labiatum, FINLAY **234** p. 524. —*P.*, IREDALE **352** p. 254.

†*Priene*, FINLAY **231** p. 462.

†*Ranella* with *R. minuteornata*, *neuvillei*, **spp. n.**, Neogenic France, COSSMANN & PEYROT Actes soc. linn. Bordeaux **75** pp. 265, 302–305, 318.

†*Ranularia* with *R. multicostata*, *duvergieri*, **spp. n.**, Neogenic France, COSSMANN & PEYROT Actes soc. linn. Bordeaux **75** pp. 264, 290–294.

Recluzia lutea, POWELL **556.**

†*Sconsia raulini* **sp. n.** Neogenic France, COSSMANN & PEYROT Actes soc. linn. Bordeaux **75** p. 89.

†*Semicassis* with *S. dumasi*, *S. grateloupi* Desh. varr. *varicigera*, *cestasensis*, *S. jauberti*, **spp.** and **varr. n.** Neogenic France, COSSMANN & PEYROT Actes soc. linn. Bordeaux **75** pp. 72-87.—*S. striata*, WRIGLEY **719.**

Tonnidae, DALL **184.**

Trichotropidae, DALL **184.**

Triton nodifer, LIOUVILLE **420.**

Tritonia incerta, POWELL **556.**

†*Tritonidea*, WRIGLEY **719.**

Trivia, IREDALE **352** p. 257.—*T.*, PEILE **526.**

Triviella with *T. merces* **sp. n.** S.E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 183, 257.

Triviidae, DALL **184.**

SOLARIIDAE, SCALARIIDAE.

Coenaculum **gen. n.** for *Scala minuta* Tate and May IREDALE Proc. Linn. Soc. N.S.W. **49** p. 183.

Crossea, IREDALE **352** p. 251.

Crosseola **gen. n.** for *Crossea concinna* Ang., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 183.

Dolicrossea **gen. n.** for *Crossea labiata* T. Wds., IREDALE Proc. Linn. Soc. N. S.W. **49** p. 183.

Epitonium bucknilli **sp. n.** New Zealand, POWELL Trans. Proc. N. Zeal. Inst. **55** p. 138.—*E.*, IREDALE **352** p. 252.

†*Epitonium continuatum* **sp. n.** Pleistocene California, OLDROYD, T. S., Proc. U. S. Nat. Mus. **65** p. 35.—*E. insecuritum* **nom. n.** for *E.* (*Boreoscala*) *washingtonensis* Weaver & Palmer, HANNA Proc. Cal. Acad. Sci. **13** p. 165.—*E.* with *E. halimense* **sp. n.** Pliocene Japan, MAKIYAMA Japan. J. Geol. Geogr. **2** p. 21.

†*Funis bouryi* **sp. n.** Cretaceous Madagascar, COTTREAU Ann. paléont. Paris **11** p. 165.

†*Homalaxis*, WRIGLEY **719**.

†*Jurassiphorus*, COSSMANN **159** p.13.

†*Scala amoena* **sp. n.** Tertiary Japan., YOKOYAMA Japan J. Geol. Geogr. **2** p. 54.

†*Scalaria molengraaffi* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** p. 73 [215].

†*Solarium*, WRIGLEY **719**.

Tenuiscala simplex is a syn. of *Epitonium s.*, FINLAY Proc. Malac. Soc. **16** p. 102.

PYRAMIDELLIDAE, STROMBIFORMIDAE.

†*Acirsa*, COSSMANN **157** p. 5.

†*Chemnitzia subregularis* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** p. 82 [224].

†*Eulima christyi* **sp. n.** Pliocene N. Zealand, MARWICK Trans. Proc. N. Zeal. Inst. **55** p. 195.

Icuncula **gen. n.** for *Cingulina torcularis* T. Wds., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 183.

Melanella (*M.*) *olssoni*, *M.* (*Balcis*) *elenensis*, **spp. n.**, Ecuador, BARTSCH Proc. U. S. Nat. Mus. Washington No. 2551 **66** pp. 8–9.

†*Odontostomia dunnensis*, *vacavillensis* **spp. n.** Eocene California, PALMER, Univ. Cal. Pub. Zool. **14** pp. 297–298.

Odostomia(*Chrysallida*) *olssoni*, *melitta* **spp. n.**, Ecuador, BARTSCH Proc. U. S. Nat. Mus. Washington No. 2551 **66** pp. 7–8.

†*Odostomia santana* **sp. n.** Cretaceous California, PACKARD Univ. Cal. Publ. Geol. **13** p. 428.—*O.* (*Ivara*) *amava*, *O.* (*Chrysallida*) *gomphina*, *scelera*, *O.* (*Evalea*) *tersa*, *ithea*, *manca*, *civitella*, *fitella*, *O.* (*Amaura*) *menzola*, *trochilia*, *sanesia*, *timessa*, **spp. n.**, Pleistocene California, OLDROYD, T. S., Proc. U. S. Nat. Mus. **65** pp. 29–35.—*O.*, HANNA **309** p. 174.

†*Ptychostoma*, GEMMELLARO **264** p. 173.

Pryramidella (*Longchaeus*) *elenensi* **sp. n.** Eucador, BARTSCH Proc. U. S. Nat. Mus. Washington No. 2551 **66** p. 1.

†*Pyramidella* (?) *praecursor* **nom. n.** for *Eulima smithi* Van Winkle, HANNA Proc. Cal. Acad. Sci. **13** p. 178.

Pyrgulina ecclesia (Preston) **nom. n.** for *Chrysallida e.* Preston and *P. nadiensis* P. **nom. n.** for *C. nadiensis* P., ANNANDALE Mem. Ind. Mus. **5** p. 856.—*P.*, ANNANDALE **19** p. 867.

Stilifer, CLARK, A. H., **131** p. 647.

Stylina, CLARK, A.H., **131** p. 648.

†*Syrnola concava*, *unicostata*, **spp. n.**, Eocene California, PALMER Univ. Cal. Pub. Zool. **14** p. 298.

Turbonilla powelli **sp. n.** New Zealand BUCKNILL Proc. Malac. Soc. **16** p. 122.—*T.* with *T. rambhaensis* **nom. n.** for *Vanesia r.* Preston, ANNANDALE Mem. Ind. Mus. **5** pp. 855, 867.—*T.* (*Chemnitzia*) *theone*, *oenoa*, *T.* (*Turbonilla*) *axeli*, *T.* (*Strioturbonilla*) *evagone*, *nychia thyne*, *T.* (*Pyrgiscus*) *melea*, *evadua*, *T.* (*Bartschella*) *semele*, **spp. n.**, Ecuador, BARTSCH Proc. U. S. Nat. Mus. Washington No. 2551 **66** pp. 2–7.—*T.* (*Pyrgolamproes*) *blanda* **sp. n.** N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 522.

†*Turbonilla dunnensis* **sp. n.** Eocene California, PALMER Univ. Cal. Pub. Zool. **14** p. 279.—*T.* (*Strioturbonilla*) *pecora*, *T.* (*Pyrgolampros*) *collisella*, *idae*, *T.* (*Pyrgiscus*) *himerta*, *T.* (*Mormula*) *epiphanea*, **spp. n.** Pleistocene California, OLDROYD, T. S., Proc. U. S. Nat. Mus. **65** pp. 24–29.

HETEROPODA.

Atlanta, BUCKMANN **98** pp. 520, 533.

Carinaria, BUCKMANN **98** pp. 518, 530.—*C.*, BRUËL **94**.

Firoloida, BUCKMANN **98** pp. 518, 529.

Oxygyrus, BUCKMANN **98** pp. 519, 532.

Pterotrachea, BUCKMANN **98** p. 523.

STENOGLOSSA.

TURBINELLIDAE, FASCIOLARIIDAE, MITRIDAE.

Æthocola raphana (Lk.) 1829 should replace *Siphonalia nodosa* (Mart.) 1784 : *Æ. pagoda* **nom. n.** for *S. turrita* Suter 1914, FINLAY Proc. Malac. Soc. **16** pp. 102–103.

†*Aethocola taitae* **sp. n.** Pliocene N. Zealand, MARWICK Trans. Proc. N. Zeal. Inst. **55** p. 197.

Berylsma **gen. n.** for *Fusus waitei* Hed., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 183.

Colus novae-hollandiae grandiculus **subsp. n.** S. E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 183.

†*Conomitra* with *C. othoniana* **sp. n.** Tertiary N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst **55** p. 467.

†*Euthriofusus crescentis* **sp. n.** Eocene California, PALMER Univ. Cal. Pub. Zool. **14** p. 295.

Fasciolaria trapezium, PETIT **531**.—*F.*, IREDALE **352** p. 264.

Fasciolariidae, DALL **184**.

†*Ficus*, WRIGLEY **719**.

Fusinus, IREDALE **352** pp. 266–267.

†*Fusinus* with *F. obtentus* **nom. n.** for *F.* (*Priscofusus*) *lineatus* Dick. HANNA Proc. Cal. Acad. Sci. **13** p. 166.

†*Fusus* with *F. abruptus* var. *gottschei*, *F. gürichi* **var.** and **sp. n.** Miocene GRIPP. Jahrb. Hamburg wiss. Anst. **1914** pp. 21–24 [? Original pagination].—*F. trilineatus* Sow and *F. multisulcatus* Nyst., OPPENHEIM **501**. — *Fusus trilineatus* Sow. and *F. multisulcatus* Nyst., KRAUSE **386**.—*F. edwardsii*, WRIGLEY **719**.

†*Inglisella* **gen. n.** Type *Ptychatractus pukeuriensis* Sut., FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 513.

†*Koilopleura* **gen. n.** type *Clavella sinuata* Gabb., TRASK Univ. Cal. Publ. Geol. **13** pp. 157–158.

Lataxiena, IREDALE **352** p. 271.

Latirus (?) *marshalli* **nom. n.** for *L. dubius* Marsh. 1919, FINLAY Proc. Malac. Soc. **16** p. 102.

†*Maorivetia* **gen. n.** Type *Turbinella brevirostris* Hutt., FINLAY Trans. Proc. N. Zeal. Inst **55** p. 513.

†*Mitra eusulcata*, *elatior*, **spp. n.**, Tertiary N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** pp. 468–469.—*M. pristina* **sp. n.** Tertiary Japan, YOKOYAMA J. Coll. Sci. Tōkyō **45** Art. 2 p. 8.

Propefusus **gen. n.** for *Fusus pyrulatus* Reeve., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 183.—*P.*, IREDALE **352** p. 268.

†*Rugobela* **gen. n.** Type *Ptychatractus tenuiliratus* Sut., FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 514.

Searlesia, MILLER, H. M., **456**.

†*Semifusus bifasciatus*, WRIGLEY **719**.

†*Siphonalia rodeoensis* **sp. n.** Tertiary California, TRASK Univ. Cal. Publ. Geol. **13** p. 155.—*S. dubius* **sp. n.** Cretaceous California, PACKARD Univ. Cal. Publ. Geol. **13** p. 431.—*S. clarki* Dick., HANNA **309** p. 180.—*S. tuberosa*, WRIGLEY **719**.

†*Sycum geayi* **sp. n.** Cretaceous Madagascar, COTTREAU Ann. paléont. Paris **11** p. 176.

†*Taurasia* with *T. pleurotoma* var. *infundibulata*, *T. sacyi* **sp.** and **var. n.** Neogenic France, COSSMANN & PEYROT Actes soc. linn. Bordeaux **75** pp. 253–258.

†*Uromitra etremoides* **sp. n.** Tertiary N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 469.

Verconella compta **sp. n.** N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 523.—*V.*, IREDALE **352** p. 266.

†*Verconella dubia, thomsoni,* **spp. n.**, Pliocene N. Zealand, MARWICK Trans. Proc. N. Zeal. Inst. **55** p. 196.—*V. marshalli* **sp. n.** Tertiary N. Zealand, MURDOCH Trans. Proc. N. Zeal. Inst. **55** p. 159.

Vexillum suteri **nom. n.** for *V. ligatum* FINLAY Proc. Malac. Soc. **16** p. 102.

BUCCINIDAE, NASSARIIDAE, MURICIDAE, PURPURIDAE, HALIIDAE, CANCELLARIIDAE, PYRENIDAE, THAIDIDAE.

Acanthina, STRONG **647**.

†*Acanthina* with *A. lesvignesi* **sp. n.** Neogenic France, COSSMANN & PEYROT Actes soc. linn. Bordeaux **75** pp. 247, 258–260.—*A. perrini* **sp. n.** Tertiary California, TRASK Univ. Cal. Publ. Geol. **13** p. 157.

Agnewia, IREDALE **352** p. 274.

†*Alia tuberosa major* **subsp. n.** Pleistocene California, OLDROYD, T. S., Proc. U. S. Nat. Mus. **65** p. 24.

†*Anachis speighti* **sp. n.** Pliocene N. Zealand, MARWICK Trans. Proc. N. Zeal. Inst. **55** p. 199.

Bedeva **gen. n.** Type *Trophon hanleyi* Angas, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 273.

Cancellaria, IREDALE **352** p. 262.

†*Cancellaria* with *C. angelana* **nom. n.** for *C. quadrata* Moody ; *C. siletzensis* **nom. n.** for *C. rotunda* And. and Martin ; *C. simiana* **nom. n.** for *C. crassa* Waring, HANNA Proc. Cal. Acad. Sci. **13** pp. 159–160.

Cancellariidae, DALL **184**.

Cereobullia **gen. n.** for *Bullia ceroplasta* Melv. MELVILL & PEILE Proc. Malac Soc. **16** pp. 138–139.

Chrysodomidae, DALL **184**.

†*Chrysodomus* ? *praenominata* **nom. n.** for *C. packardi* Nomland, HANNA Proc. Cal. Acad. Sci. **13** p. 162.

Columbarium should be placed near the Muricidae, PEILE Proc. Malac. Soc. London **15** 1922 p. 14 [Accidentally omitted from previous records].

Columbella, THIELE **656**.

†*Columbella arnoldi* Dall, HANNA **309** p. 163.—*C.*, MAKIYAMA **429** p. 21.

Columbellidae, DALL **184**.

Cominella inflata is a syn. of *Verconella i.* : *C. errata* **nom. n.** for *C. carinata*, FINLAY Proc. Malac, Soc. **16** p. 103.

†*Cominella*, MARWICK **439**.

†*Concholepas*, COSSMANN & PEYROT **158** pp. 247, 261.

†*Coralliophila*, COSSMANN & PEYROT **158** p. 262.

Cuma disjuncta Annandale **var. n.** *obliterata* Chilka Lake, ANNANDALE Mem. Ind. Mus. **5** p. 870.

†*Cymia* with *C. pluriplicata* **sp. n.** Neogenic France, COSSMANN & PEYROT Actes soc. linn. Bordeaux **75** pp. 246, 248–252.

†*Cyphonochilus*, COSSMANN & PEYROT **158** pp. 241–243.

†*Eburna elata* **sp .n.** Tertiary Japan, YOKOYAMA J. Coll. Sci. Tōkyō **45** Art. **2** p. 9.

†*Eupleura*, COSSMANN & PEYROT **158** p. 234.

†*Eutritonium* with *E. salbriacense* nom. mut. for *Triton nodiferum* Ben. *E. sacyi*, *E.* (*Lampusia*) *aquitanicum* nom. mut. for *T. vespaceum* Grat., *E.* (*L.*) *doliaroides*, *E.* (*Sassia*) *benoisti*, *multifilosum*, *aperturale*, *raulini*, **spp.** and **mutt. n.** Neogenic France, COSSMANN & PEYROT Actes soc. linn. Bordeaux **75** 264–290.

Fluella **sec. n.** *Astyris* type *A. vidua* Dall **sp. n.** off Florida, DALL Bul. Biol. Soc. Washington **37** p. 87.

†*Hadriania* with *H. minutesquama*, *H.* (*Pseudomurex*) *cantharoides*, **spp. n.**, Neogenic France, COSSMANN & PEYROT Actes soc. linn. Bordeaux **75** pp. 193, 230–234.

†*Iopas*, COSSMANN & PEYROT, **158** p. 246.

†*Janiopsis californiensis* **sp. n.** Eocene California, PALMER Univ. Cal. Pub. Zool. **14** p. 293.

Langfordia **subgen. n.** ? type *Murex* (*L.*) *cuspidifera* Dall **sp. n.** Hawaiian Isds., DALL Bul. Biol. Soc. Washington **37** p. 89.

†*Liomesus* with *L. soósi* **sp. n.** Pliocene Iceland, SCHLESCH Arch. Moll. Frankfurt **56** pp. 21–22.

†*Lysis californicus* **sp. n.** Cretaceous California, PACKARD Univ. Cal. Publ. Geol. **13** p. 431.

†*Metula* (*Celatoconus*) *vacavillensis* **sp. n.** Eocene California, PALMER Univ. Cal. Pub. Zool. **14** p. 294.

Miscrocancilla **sec. n.** *Admete* type, *A. microscopica* Dall, DALL Bul. Biol. Soc. Washington **37** p. 87.

Muricidae, DALL **184.**

Murex ramosus, PETIT **531.**—*M. trunculus*, FADDA **225.**

†*Murex calamitus* **nom. n.** for *M. vaughani* Dick.; *M.* (*Orinebra*) [? *Ocinebra*] *rodeoensis* Clark **nom. n.** for *M.* (*Ocinebra*) *packardi* Cl., *M. terualentus* **nom. n.** for *M.* (*O.*) *concinna* Nomland, HANNA Proc. Cal. Acad. Sci. **13** p. 172. —*M.* with *M. sandbergeri* **var. n.** *arenaria*; *M. nodosus* **nom. n.** for *M. lamarcki* Grat.; *M. tricostatus, costulatus*, **spp. n.**, Tertiary Germany, STEUER Abh. geol. Landesanst. Darmstadt **6** pp. 20–36.—*M. with M.* (*Tubicauda*) *subgranifer*, *M.* (*Haustellum*) *haudmuticus*, *M.* (*Pteropurpura*) *raulini*, *M.* (*Alipurpura*), *peyreirensis, valdentortus*, *M.* (*Muricantha*) *frayssei*, *M.* (*Favartia*) *dujardini* Tourn. mut. *exaquitanicus*, *M.* (*F.*) *pseudo-aratus*, *M.* (*F.*) *suboblongus* d'Orb. var. *quadrangulatus*, *M.* (*F.*) *absonus* Jan. mut. *interfunatus*, *M.* (*Poirieria*) *elatospira, aturensis, cedillatus*, **spp. var.** and **mutt. n.** Neogenic France, COSSMANN & PEYROT Actes soc. linn. Bordeaux **75** pp. 95–144.—*M.* (*Phyllonotus*) *bullocki* **sp. n.** Tertiary Japan, YOKOYAMA Japan. J. Geol. Geogr. **2** p. 51.

Nassa mutabilis, WEBER, H., **696.**—*N.*, ANNANDALE **19** p. 869.—*N.*, MELVILL & PEILE **454.**

†*Nassa whitneyi* **sp. n.** Tertiary California, TRASK Univ. Cal. Publ. Geol. **13** p. 154.—*N.* (*Hima*) *demissa* **sp. n.** Tertiary Japan, YOKOYAMA J. Coll. Sci. Tōkyō **45** Art. 2 p. 10.

Nassarius, IREDALE **352** pp. 270–271.

†*Nassicola* **sec. n.** Type *Neptunea costata* Hutt., FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 514.

Neptunea Bolten, DALL **183** p. 89.

†*Oamaruia* **gen. n.** Type *Admete suteri* M. and M., FINLAY Trans. Proc. N. Zeal. Inst **55** pp. 495–516.

†*Ocinebra* with *O. pentaedrica, duvergieri, thilensis, sacyi, cazeauxi, sublavata* varr. *umbilicina* and *martillacensis*, *O.* (*Ocinebrina*) *occitanica, gibbovaricosa*, *O.* (*O.*) *avitensis* nom. mut. for *Murex scalaris*, *O.* (*O.*) *excoelata* nom. mut. for *Fusus lavatus*, *O. excoelata* varr. *merignacensis, cestasensis* **spp. varr.** and **mutt. n.** Neogenic France, COSSMANN & PEYROT Actes soc. linn. Bordeaux **75** pp. 193–225.—*O. tsuzurensis* **sp. n.** Tertiary Japan, YOKOYAMA J. Coll. Sci. Tōkyō **45** Art. 3 p. 10.

Parasagena **sec. n.** *Astyris* type *A.* (*P.*) *georgiana* **sp. n.** off Georgia U.S.A., DALL Biol. Bul. Soc. Washington **37** p. 87.

†*Phos dumbleana* **nom. n.** for *Pleurotoma* (*Clathurella*) *dumblei*, HANNA Proc. Cal. Acad. Sci. **13** p. 183.

†*Pisania*, WRIGLEY **719.**

Plectaria **sec. n.** *Astyris* type *A.* (*P.*) *crumena* Dall **sp. n.** off Florida, DALL Bul. Biol. Soc. Washington **37** p. 89.

Prodotia **subgen. n.** type *Pisania billeheusti* Souv., DALL Bul. Biol. Soc. Washington **37** p. 89.

Pseudamycla, THIELE **656.**

Pseudanachis, THIELE **656.**

†*Pterotyphis*, COSSMANN & PEYROT **158** pp. 239–240.

Purpura, MILLER, H. M. **456.**

†*Purpura* with *P.* (*Stramonita*) *sacyi* **sp. n.** Neogenic France, COSSMANN & PEYROT Actes soc. linn. Bordeaux **75** pp. 246–248.

†*Purpuroidea profundesulcata* **sp. n.** and **var. n.** *gracilis* Trias Sicily, GEMMELLARO Giorn. sc. nat. econ. Palermo **33** pp. 172–173.

Pygmaeonassa **gen. n.** type *Nassa orissaensis* Preston; *P. denegabilis* **nom. n.** for *Nassa d.* Preston, ANNANDALE Mem. Ind. Mus. 5 pp. 855, 869.

Pyrene, IREDALE **352** p. 271.—*P.*, THIELE **656.**

Radulphus **gen.. n.** with *R. royanus* **sp. n.** N. S. Wales, IREDALE Proc. Linn. Soc. N. S. W. **49** pp. 183, 270.

†*Rapana*, COSSMANN & PEYROT **158** p. 244.

Thais, IREDALE **352** p. 273.—*T.*, MILLER, H. M., **456.**

†*Trigonostoma waikaiaensis, christiei*, **spp. n.**, Tertiary N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 466.

†*Trophon daviesi* **sp. n.** *T. gracilis clarki* **nom. n.** for *T. g. pabloensis* Tertiary California, TRASK Univ. Cal. Publ. Geol. **13** pp. 155–156.—*T. murdochi* **sp. n.** Pliocene N. Zealand, MARWICK Trans. Proc. N. Zeal. Inst. **55** p. 198.

Typhis with *T. philippensis interpres* **subsp. n.** S.E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 183, 271–273.

†*Typhis francescae* **sp. n.** Tertiary N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 465.—*T.* with *T. peyreirensis* **sp. n.** Neogenic France, COSSMANN & PEYROT Actes soc. linn. Bordeaux **75** pp. 235–239.—*T.*, STEUER **639** pp. 37–41.

†*Vitularia* with *V. salbriacensis* **sp. n.** Neogenic France, COSSMANN & PEYROT Actes soc. linn. Bordeaux **75** pp. 226–229.

Xymene, IREDALE **352** p. 273.

†*Xymene* with *X. oliveri* **sp. n.** Pliocene N. Zealand, MARWICK Trans. Proc. N. Zeal. Inst. **55** pp. 198–199.

Zemira, IREDALE **352** p. 252.—*Z.*, MARWICK **438.**

TURRIDAE, TEREBRIDAE, CONIDAE.

†*Antiplanes rotula* Dall, HANNA **309** p. 156.

†*Austrotoma* **subgen. n.** Type *Bathytoma excavata* Sut. FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 515.

†*Bathytoma granata*, WRIGLEY **719.**

†*Borsonella angelana* **nom. n.** for *Pleurotoma* (*Borsonia*) *dalli* Arnold; *B.* ? *nuncapatia* **nom. n.** for *Turris lincolnensis* Van Winkle; *B. polynotata* **nom. n.** for *T.* (*Drillia*) *modestus* Moody, HANNA Proc. Cal. Acad. Sci. **13** p. 158.

Carinapex **subgen. n.** Genus *Daphnobela* type *Drillia minutissima* GARR., DALL. Bul. Biol. Soc. Washington **37** p. 88.

Columbarium should be placed near the Muricidae, PEILE Proc. Malac. Soc. London **15** 1922 p. 14 [Accidentally omitted from previous records].

Conospira fracta **nom. n.** for *Conus* (*Conospira*) *deperditus* Sut. 1917, FINLAY Proc. Malac. Soc. **16** p. 105.

Conus, IREDALE **352** p. 263.

†*Conus* (*Lithoconus*) *triangularis* **sp. n.** Tertiary N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 479.

†*Cryptoconus injucundus* **nom. n.** for *Drillia cooperi* Dick., HANNA Proc. Cal. Acad. Sci. **13** p. 168.

†*Cryptomella* **subgen. n.** Type *Leucosyrinx transenna* Sut., FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 516.

Cryptomitra **subgen. n.** type *Pleurotomella* ? *elimacella* Dall 1896, DALL Bul. Biol. Soc. Washington **37** p. 89.

†*Drillia sobrina, dainichiensis*, **spp. n.** Tertiary Japan, YOKOYAMA J. Coll. Sci. Tōkyō **45** Art. 2 pp. 5–6.

Gemmula waihaoensis **nom. n.** for *Turris regius* Suter 1917: *T. insensus* **nom. n.** for *T. neglectus* Suter 1917, FINLAY Proc. Malac. Soc. **16** p. 104.

†*Glyphostoma oscilata* **nom. n.** for *Pleurotoma* (*Clathurella, Glyphostoma*) *dalli*, Böse and Toula, HANNA Proc. Cal. Acad. Sci. **13** p. 167.

†*Hemiconus trailli* (Hutt.) should replace *H. ornatus* (Hutt) 1873, FINLAY Proc. Malac. Soc. **16** p. 105.

†*Lora* with *L. borealis cossmanni*, *L. dautzenbergi*, *L. decussata tjörnesensis* **sp.** and **subspp. n.** Pliocene Iceland, SCHLESCH Arch. Moll. Frankfurt **56** pp. 18–20.

Mangelia [*vide etiam Mangilia*] with *Asperdaphne murdochi* **nom. n.** for *M. corrugata* (Murd.) 1900, FINLAY Proc. Malac. Soc. **16** pp. 104–105.

Mangilia [*vide etiam Mangelia*] with *M. atlantica* and var. *elongata* **var.** and **sp. n.** Atlantic Coast Morocco, PALLARY Expl. sci. Maroc **2** p. 26.—*M. barbarensis* **nom. n.** for *M. angulata* Carp. 1865 *non M. a.* Reeve 1846, OLDROYD, I. S. Publ. Puget Sd. Biol. St. **4** p. 82.

†*Mangilia morgani* **sp. n.** Pliocene N. Zealand, MARWICK Trans. Proc. N. Zeal. Inst. **55** p. 201.—?*M. vacavillensis* **sp. n.** Eocene California, PALMER Univ. Cal. Pub. Zool. **14** p. 300.

Mordica brunonia **sp. n.** Hawaiian Isds., DALL Bul. Biol. Soc. Washington **37** p. 88.

†*Parasyrinx* **gen. n.** *Pleurotoma alta* Harris, FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 514.

Parviterebra, TOMLIN **662.**

Pervicacia **gen. n.** for *Terebra ustulata* Desh. with *P. assecla* **sp. n.** N. S. Wales, IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 183, 263.

†*Phenatoma* **gen. n.** Type *Pleurotoma novae-zelandiae* Rve., FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 515.

†*Pleurotoma*, WILCKENS **708** p. 541.

Pseudotoma huttoni **nom. n.** for *Bathytoma sulcata* Hutt. 1873, FINLAY Proc. Malac. Soc. **16** p. 104.

†*Surcula binotata* **nom. n.** for *Turris plicata* Waring; *S. hobsoni* **nom. n.** for *Pleurotoma* (*Drillia*) *dalli* Toula; *S. evermanni* **nom. n.** for *T. pulchra* Dick.; *S. polyapellatia* **nom. n.** for *D. ornata* Dick., HANNA Proc. Cal. Acad. Sci. **13** pp. 181–182.

Teleochilus with *T. royanus* **sp. n.** S. E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 183, 264.

Terebra malonei, pedroana hemphilli **sp.** and **subsp. n.** California, VANATTA Proc. Acad. Nat. Sci. Philad. **76** pp. 424–425.—*T.*, IREDALE **352** p. 262.

Tritonoturris **gen. n.** type *Clathurella robillardi* Barclay, DALL Bul. Biol. Soc. Washington **37** p. 88.

Turrhyssa **gen. n.** type *Clathurella bicarinata* Pease, DALL Bul. Biol. Soc. Washington **37** p. 88.

†*Turricula oamarutica* (Sut.) 1917 should replace *Surcula fusiformis* (Hutt.) 1877, FINLAY Proc. Malac. Soc. **16** p. 104.

Turridae, DALL **184.**

†*Turris*, HANNA **309** p. 184.

Zella **gen. n.** for *Terebra beddomei* Pett., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 183.

VOLUTIDAE, OLIVIDAE, MARGINELLIDAE, HARPIDAE.

Alcithoe turrita, FINLAY **230.**

†*Alcithoe lutea* **sp. n.** Pliocene N. Zealand, MARWICK Trans. Proc. N. Zeal. Inst. **55** p. 200.

Ancilla mucronata, POWELL **556.**—*A.*, IREDALE **352** p. 259.

†*Ancilla okawai* **sp. n.** Tertiary Japan, YOKOYAMA J. Coll. Sci. Tōkyō **45** Art. 2 p. 7.—*A. meganosensis, vacavillensis*, **spp. n.**, Eocene California, PALMER Univ. Cal. Pub. Zool. **14** pp. 296–297.—*A.* (*Baryspira*) *opima* **sp. n.** Pliocene N. Zealand, MARWICK Trans. Proc. N. Zeal. Inst. **55** p. 200.

Baryspira fusiformis gaza **subsp. n.** S. E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 183.

Belloliva **gen. n.** type *Olivella brazieri*, Ang., PEILE Proc. Malac. Soc. London **15** 1922 p. 18 [Accidentally omitted from previous records].

Cupidoliva **gen. n.** for *Olivella nympha* Ad. and Ang., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 183.

Cymbiola complexa **nom. n.** for *Voluta punctata* Swains, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 183.

Gemmoliva **subgen. n.** for *Oliva triticea* Ducl., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 183.

†*Lyria zelandica* **sp. n.** Tertiary N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 470.

Marginella cairoma **sp. n.** New Zealand, BROOKES Trans. Proc. N. Zeal. Inst. **55** p. 154.

†*Marginella instabilata* **nom. n.** for *M. pacifica* Dick. HANNA Proc. Cal. Acad. Sci. **13** p. 170.—*M. jewettii nanella* **subsp. n.** Pleistocene California, OLDROYD, T. S., Proc. U. S. Nat. Mus. **65** p. 24.—*M.* (*Glabrella*) *brevispira* **sp. n.** Pliocene N. Zealand, MARWICK Trans. Proc. N. Zeal. Inst. **55** p. 201.

Marginellidae, DALL **184.**

Microvoluta with *M. royana* **sp. n.** N. S. Wales, IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 183, 268.

†*Oliva simondsi* **sp. n.** Tertiary California, TRASK Univ. Cal. Publ. Geol. **13** p. 159.

Olivella, IREDALE **352** p. 258.

Olivellidae, DALL **184**.

Peculator **gen. n.** with *P. verconis* **sp. n.** N. S. Wales, IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 183, 269.

Scaphella caroli **nom. n.** for *Voluta maculata* Swains., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 183.

†*Volutoderma magna, santana*, **spp. n.**, Cretaceous California, PACKARD Univ. Cal. Publ. Geol. **13** p. 432.

Yetus, LIOUVILLE **420**.

INCERTAE SEDIS.

Argalista kingensis **sp. n.** King Isd. Tasmania, MAY Paprs. Proc. R. Soc. Tasmania **1923** p. 49.

Brookula consobrina **sp. n.** King Isd., Tasmania, MAY Paprs. Proc. R. Soc. Tasmania **1923** p. 50.

†*Bullaria tumida* **sp. n.** Cretaceous California, PACKARD Univ. Cal. Publ. Geol. **13** p. 433.

†*Catozone striatula* **sp. n.** Silurian Scotland, LONGSTAFF Q. J. Geol. Soc. **80** p. 426.

†*Flemingia*, DEMANET **200** p. 233.

†*Gastropodum*, WILCKENS **708** p. 542.

†*Girvania* **subgen. n.** *Katosira* with *G. excavata* **sp. n.** Ordovician Scotland, LONGSTAFF Q. J. Geol. Soc. **80** p. 430.

†*Hologyra* with *H. timorensis* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** pp. 65 [207]–66 [208].

†*Lesueurilla* with *L. scotica, balclatchiensis* **spp. n.** Ordovician Scotland, LONGSTAFF Q. J. Geol. Soc. **80** pp. 436–438.

†*Liospira* with *L. marklandensis* **sp. n.** Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** p. 144.

†(?) *Lissochilina timorensis* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** p. 85 [227].

†*Lophospira occidentalis* **sp. n.** Upper Ordovician British Columbia, WILSON Canad. Field. Nat. **38** p. 151.

†*Maclurea sedgwicki* **nom. n.** for *M. magna* F. M'Coy. 1850, *M. salteri* **sp. n.** Ordovician Scotland, LONGSTAFF Q. J. Geol. Soc. **80** pp. 431–433.

†*Mayena*, FINLAY **231** p. 462.

Melavella, CLARK A. H. **131** p. 648.

†*Omphaloptycha* with *O. panormitana, gemmellaroi, tommasii, ooniopsis, O.* (*Coelostylina*) *distefanoi, O.*? *mercati* var. *elongata*, **spp. & var. n.** Trias Sicily GEMMELLARO Giorn. sc. nat. econ. Palermo **33** pp. 176–192.—*O.*, COX **162** p. 87.

Onchodia **sec. n.** *Laskeya* type *L.* (*O.*) *benthica* **sp. n.** off Georgia U.S.A., DALL Biol. Bul. Soc. Washington **37** p. 87.

†?*Protorcula wichmanni* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** p. 83 [225].

Pseudamnicola, PALLARY **518** p. 215.

†*Raphitoma nebula odhneri* **subsp. n.** Pliocene Iceland, SCHLESCH Arch. Moll. Frankfurt **56** p. 20.

Sabinella, CLARK, A. H. **131** p. 648.

†*Seelya moydartensis* **sp. n.** Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** p. 145.

†*Spiroecus* **subgen. n.** *Stephanocosmia* with *S. girvanensis* **sp. n.** Ordovician Scotland, LONGSTAFF Q. J. Geol. Soc. **80** p. 429.

†*Undularia*, GEMMELLARO **264** p. 193.

Xymene robustus **sp. n.** N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 520.

Zalipais parva **sp. n.** N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 518.

†*Zigopleura ryazanceviana* **sp. n.** Upper Palaeozoic Russia, FRÉDÉRIX Mém. Com. Géol. Petrograd **109** p. 19.

Opisthobranchia.

Acanthopsole pselliotes, schwobi, faurei, **spp. n.**, France, LABBÉ Bul. soc. sci. nat. Nantes **3** pp. 7–8.—*A. pselliotes, schwobi, faurei*, **spp. n.** France, LABBÉ Bul. soc. zool. Paris **48** pp. 266–267.

†*Acteocina pedroensis* **sp. n.** Pleistocene California, OLDROYD, T. S., Proc. U. S. Nat. Mus. **65** p. 23.

Actaeon [*Vide etiam Acteon*] *praestitus* **nom. n.** for *A. sulcatus* (Hutt) 1885, FINLAY Proc. Malac. Soc. **16** p. 105.

†*Acteon* [*Vide etiam Actaeon*] *vacavillensis* **sp. n.** Eocene California, PALMER Univ. Cal. Publ. Zool. **14** p. 292.

Aeolidia, Løyning **424** pp. 69, 94.

Aeolidiella croisicensis **sp. n.** France, Labbé Bul. soc. sci. nat. Nantes **3** p. 9. —*A. croisicensis* **sp. n.** France, Labbé Bul. soc. zool. Paris **48** p. 267.—*A.*, Løyning **424** pp. 74, 94.

Aglaja with *A. bakeri* **sp. n.** Gulf of California, MacFarland Proc. Cal. Acad. Sci. **13** pp. 390–396.

Alloiodoris with *A. hedleyi* **sp. n.** W. Australia, O'Donoghue J. Linn. Soc. Zool. London **35** pp. 547–550.

Amphorina aurantiaca, C[owan] **160.** —*A.*, Løyning **424** pp. 56, 93.

Aphelodoris, O'Donoghue **490** p. 556.

Aplysia, Lewy **408.**

Archidoris tuberculata, Prenant **564** p. 370.

Asteronotus with *A. fuscus* **sp. n.** W. Australia, O'Donoghue J. Linn. Soc. Zool. London **35** pp. 550–552.

Atyscaphander **gen. n.** Scaphandridae with *A. exarata* **nom. n.** for *Haminea e.* Kob. Annandale in Annandale & Prashad Proc. Malac. Soc. **16** pp. 34–37.

Berthella, O'Donoghue **490** p. 536.

Branchioteuthis, Grieg **288** p. 10.

†*Bullaria obtenta* **nom. n.** for *B. tumida* Pack., Hanna Proc. Cal. Acad. Sci. **13** p. 159.

Cavolinia, Grieg **288** p. 7.

Cavoliniidae, Palmer **520** p. 304.

Ceratosoma, O'Donoghue **490** pp. 558, 569.

Chromodoris zebra, Crozier **173.**—*C.*, Crozier **175.**

Clio, Delap **199.**—*C.*, Grieg **288** pp. 5–7.

Clione, Grieg **288** p. 8.

Clionina, Pruvot-Fol **567** p. 304.

Cliopsis, Pruvot-Fol **567** p. 357.

†*Coleoloides*, Cobbold **137.**

†*Coleolus interstriatus* **sp. n.** Silurian U.S.A., Swartz & Prouty Maryld. Geol. Surv. Silur. Mem. **1923** p. 491.

†*Conularia* with *C. twenhofeli, honeymani, antigonishensis*, **spp. n.**, Silurian Nova Scotia, McLearn Geol. Surv. Canada **137** pp. 37–38 [classed by author as Vermes].—*C.*, Bekker **50** p. 19.—*C.*, Hayasaka **313** p. 111.

Coryphella, Løyning **424** pp. 24, 91.

Dendrodoris, O'Donoghue **490** p. 560.

Dendronotus frondosus, Elmhirst **221.**

Desmotheuthis, Grieg **288** p. 10.

Didontoglossa **gen. n.** Type *Tornatina estriata* Preston, Annandale Mem. Ind. Mus. **5** p. 871.

Dolabrifera with *D. pelsartensis* **sp. n.** W. Australia, O'Donoghue J. Linn. Soc. Zool. London **35** pp. 534–535.

Embletonia, Løyning **424** pp. 64, 94.

Facelina, Løyning **424** pp. 50, 93.

Favorinus, Løyning **424**, pp. 79, 95.

Fowlerina, Grieg **288** p. 9.

Glossodoris with *G. westraliensis* **sp. n.** W. Australia, O'Donoghue J. Linn. Soc. Zool. London **35** pp. 553–556.

Galvinia tricolor, Elmhirst **221.**—*G.* Løyning **424** pp. 41, 92.

Haminea, Annandale **19** p. 873.

Hexabranchus, O'Donoghue **490** p. 545.

Hydatina physis, Powell **556.**

†*Hyolithes*, Stewart in Branson **89** p. 261.—*H.*, Cobbold **137.**

Ianthina, Delap **199.**

Limacina, Delap **199.**—*L.*, Grieg **288** pp. 4–5.—*L.*, Meek **450.**

Melibe leonina, Agersborg **5.**

Nembrotha with *N. purpureolineata* **sp. n.** W. Australia, O'Donoghue J. Linn. Soc. Zool. London **35** pp. 567–569.

Notodoris, O'Donoghue **490** p. 564.

Peracle, Meek **450.**

Philine, Iredale **352** p. 277.

Phyllirhoe bucephala, Zirpolo **734.**

Placobranchus with *P. expansa* **sp. n.** W. Australia, O'Donoghue J. Linn. Soc. Zool. London **35** p. 539.

Pneumoderma, PRUVOT-FOL **567** p. 382.

Pneumodermopsis canephora **sp. n.** Mediterranean, PRUVOT-FOL Arch. Zool. Paris **62** pp. 370–381.

Pseumodermopsis, GRIEG **238** p. 7.

Pteropoda, PALLARY **516** p. 17.

†*Ringiculidarum*, WILCKENS **708** p. 542.

†*Scaphander*, PALMER **520** p. 300.

Sphaerostoma with *S. dakini* **sp. n.** W. Australia, O'DONOGHUE J. Linn. Soc. Zool. London **35** pp. 542–543.

Spurilla margaritae **sp. n.** France, LABBÉ Bul. soc. sci. nat. Nantes **3** p. 9.—*S. margaritae* **sp. n.** France, LABBÉ Bul. soc. zool. Paris **48** p. 268.

†*Tentaculites* with *T. canadensis* **var. n.** *obtusiformis* Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** pp. 150–151. — *T.* with *T. gyracanthus* **var. n.** *marylandicus* Silurian U.S.A., SWARTZ & PROUTY Maryld. Geol. Surv. Silur. Mém. **1923** pp. 491–494.—*T.*, STEWART in BRANSON **89** p. 262.—*T.*, BRANSON **89** p. 157.

Tethys, O'DONOGHUE **490** pp. 528–533.—*T.*, MACFARLAND **425** pp. 396–404.

†*Torellella*, COBBOLD **137.**

†*Tornatellaea vacavillensis* **sp. n.** Eocene California, PALMER Univ. Cal. Pub. Zool. **14** p. 293.—*T.*, COSSMANN **157** p. 21.

Tridachia, MACFARLAND **425** p. 404.

Tridachiella **gen. n.** MACFARLAND Proc. Cal. Acad. Sci. 13 pp. 405–410.

†*Tritonium eocenicum* Weaver, HANNA **309** p. 183.

Umbraculum botanicum, POWELL **556.**

Pulmonata.

ELOBIIDAE, SIPHONARIIDAE, CHILINIDAE, LIMNAEIDAE, PLANORBIDAE, ANCYLIDAE, PHYSIDAE.

†*Acella*, BOGATCHEV **71** p. 219.

Amphibola crenata, FARNIE **226.**

Amphipeplea with *A. glutinosa*, WOODWARD **716.**—*A.*, NICODIM **481** p. 28.

Ancylus, HEIDERMANNS **328.**

Anisancylus **gen. n.** type *Ancylus obliquus* Brod & Sow., PILSBRY Proc. Acad. Nat. Sci. Philad. **76** p. 58.—*A.*, PILSBRY **545** p. 51.

†*Anisomyon cragini* **sp. n.** Cretaceous Kansas, TWENHOFEL Bul. State Geol. Surv. Kansas **9** p. 54.

Aplexa, HENDERSON **331** p. 188.

Bithynia, KENNARD & WOODWARD **378** p. 125.

Bulimus, KENNARD & WOODWARD **378** p. 125.

Bulinus, KENNARD & WOODWARD **378** p. 125.

Bullinus, PALLARY **519.** p. 24.

Burnupia, CAWSTON **113.**

†*Camptoceras priscum*, WRIGLEY **720.**

Carinifex occidentalis **sp. n.** California, HANNA Proc. Cal. Acad. Sci. **13** p .133.—*C.*, HENDERSON **31** p. 181.

Carychium bermudense, VANATTA **682.**

†*Celekenia pachyostoma* **sp. n.** Pleistocene, ANDRUSSOV Mém. Com. Géol. Petrograd **110** p. 132.

Chilina aurantia Chile ; *C. castanea, parchappi minor, flammulina, felipponei, oldroydae* Argentina ; *C. olivacea* Chile, **spp.** and **subsp. n.**, MARSHALL, W. B., Proc. U. S. Nat. Mus. Washington No. 2550 **66** pp. 1–5.

†*Coretus*, WENZ **701.**

Ferrissia, CAWSTON **113.**—*F.*, HENDERSON **331** p. 189.—*F.*, PALLARY **519** p. 30.

Gadinia conica, POWELL **556.**—*G.*, IREDALE **352** p. 277.

†*Galba* (*G.*) *longiscata romani* **nom. n.** for *Limnaea l.* var. Roman 1904, WENZ Senckenbergiana **6** p. 222.

†*Gulnaria*, BOGATCHEV **71** p. 219.

Gunulachia, CAWSTON **113.**—*G.*, PALLARY **519** p. 31.—*G.*, PILSBRY **545** p. 55.

Gyraulus longios **sp. n.** China, ANNANDALE J. Asiat. Soc. Beng. **19** p. 419.

Hebetancylus, PILSBRY **545** p. 57.

Isidora, CAWSTON **113** & **114.**

Kerguelenia, IREDALE **352** p. 276.

Lanx, HENDERSON **331** p. 188.

Limnaea [*vide etiam Lymnaea*] with *L. yunnanensis* form *distensa* **nom. n.** for *Limnaeus auricularis* var. *yunnanensis* Neum., ANNANDALE J. Asiat. Soc. Beng. **19** pp. 416–419.—*L. auricularia* var *acuta*, O'MAHONY **499.**—*L. limosa*, CARDOT **106.**—*L. natalensis*, CAWSTON **114.**—*L. stagnalis*, BACHRACH & CARDOT **37.**—*L. s.* PRENNANT **562** & **564.**—*L. s.*, STANKOWITCH **629.**—*L. truncatula* & *L. pereger*, ATKINS & LEBOUR **36.**—*L.* ANNANDALE in ANNANDALE & PRASHAD **22.**—*L.*, CAWSTON **113.**—*L.*, HEIDERMANNS **328.**—*L.*, HERWERDEN, VAN **334.**—*L.*, PALLARY **519.**—*L.*, SOÓS & SCHLESCH **622.**

†*Limnaea apscheronica* **sp. n.** Pleistocene, ANDRUSSOV Mém. Com. Géol. Petrograd **110** p. 120.—*L.*, BOGATCHEV **71** pp. 215–219.

†*Lymnaea* [*vide etiam Limnaea*] *oneilli* **sp. n.** Tertiary Arctic Canada, DALL in O'NEILL Rep. Canad. Arct. Exp. 1913–18 **11** p. 27 A.—*L.*, *peregra*, LÖHNER **421.**—*L.*, *succinea*, WOODWARD **716.**—*L.*, BRUES **96** p. 416.—*L.*, HENDERSON **331** p. 161.

Lutea, Brown is a syn. of *Radix* Mont., KENNARD & WOODWARD Proc. Malac. Soc. **16** pp. 8–9.

Megasystropha, DALL **183** p. 88.

Myxas (Leach) has precedence over *Amphipeplea*, Nils., KENNARD & WOODWARD Proc. Malac. Soc. **16** p. 125.

†*Paradines* **sec. n.** type *Carinifex binneyi* Meek 1870 Pliocene, DALL Bul. Biol. Soc. Washington **37** p. 88.

Parapholyx mailliardi **sp. n.** California, HANNA Proc. Cal. Acad. Sci. **13** p. 134.

†*Payettia* **gen. n.** type *Latia dalli* Pliocene, DALL Bul. Biol. Soc. Washington **37** p. 88.

Physa bottimeri **sp. n.** Texas, CLENCH Nautilus **38** p. 12.—*P. marci* **sp. n.** California, BAKER F. C., Nautilus **38** p. 15.—*P., fontinalis*, CARDOT **105.**—*P. f.*, LÖHNER **421.**—*P.*, AGERSBORG **6.**—*P.*, BRUES **96** p. 417.—*P.*, CLENCH **136.**—*P.* HANNA **308** & **310.**—*P.*, HENDERSON **331** p. 181.—*P.*, HEIDERMANNS **328.**—*P.*, PALLARY **519** p. 23.

Physopsis, CAWSTON **112, 113** & **114.**

Planorbis : *P. strauchianus* Cless.= *P. calculiformis* Sandb., LINDHOLM Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** pp. 317–320.—*P. corneus*, PRENANT **564** p. 362.—*P. planorbis*, HOFMANN **343.**—*P. stroemi*, COOPER **150.**—*P. vorticulus*, STARK **630.**—*P. vortex*, COOPER **149.**—*P.*, AGERSBORG **6.**—*P.*, CAWSTON **113** & **114.**—*P.*, HANNA **308** & **310.**—*P.*, HEIDERMANNS **328.**—*P.*, HENDERSON **331** p. 173.—*P.*, KENNARD & WOODWARD **377.**—*P.*, PALLARY **519** p. 25.—*P.*, PILSBRY **545** pp. 49–51.

†*Planorbis calculiformis* Sdbgr., GEYER **266.**

Planorbula, PALLARY **519** p. 27.

Pugillaria **gen. n.** for *Siphonaria stowae* Verco with *P. stowae comita* **subsp. n.** S. E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 183.

†*Radix*, WENZ **701.**

Segmentina, CAWSTON **113** & **114.**—*S.*, PALLARY **519** p. 26.

Siphonaria, FARNIE **226.**—*S.*, IREDALE **352** pp. 275–276.

Spiralina type sp. is *Helix* (= *Planorbis*) *vortex* Linn. KENNARD & WOODWARD Proc. Malac. Soc. **16** pp. 10–11.

Uncancylus, PILSBRY **545** p. 58.

Vorticifex, DALL **183** p. 88.

SELENITIDAE, ZONITIDAE, LIMACIDAE, PHYLOMICIDAE, ARIONIDAE.

Agriolimax agrestis, BACHRACH & CARDOT **37** & **38.**—*A. a.*, CARDOT **106.**—*A. a.*, MILES **455.**—*A.*, HENDERSON **331** p. 150.—*A.*, HESSE **338.**—*A.*, IURINIC **355.**

Albea prophetarum [**var. n.** ?] *arabica*, *A.* (*Sphincterochila*) *boissieri* [**var. n.** ?] *depressa* Egypt, PALLARY J. Conchyliol. **68** pp. 187–190.—*A.*, PALLARY **519** p. 5.

Amalia crystallina ? **sp. n.** Spain ?, TORRES [Y] MINGUEZ Buttl. Club Mantanyenc Barcelona **3** No. **7** p. 7.—*A.* with *A. rubedo-fuliginea* **sp. n.** Spain, TORRES[Y] MINGUEZ Buttl. Club Mantanyenc Barcelona **3** No. 8 p. 6.—*A.*, IURINIC **355.**

Aneityopsis type *Aneitea macdonaldi*, Gray, COCKERELL J. Conch. Leeds **17** p. 153.

†*Archaeozonites kormosi* **sp. n.** Pliocene, HALAVÁTS Magyar Kir. Földt. Évk. Budapest **24** p. 404.

Arion ater var. *alba* **subvar. n.** *aberrans* Norway, ÖKLAND J. Conch, Leeds **17** 1924 p. 140.—*A. hortensis* Fér. var. *chloridiscolor* and *A. ruginosus* **sp.** & **var. n.** Spain, TORRES [Y] MINGUEZ Buttl. Inst. Catal. N.H. Barcelona **4** pp. 106–107.—*Arion rufus*, PRENNANT **564** p. 362.

A. subfuscus, BUTTERFIELD **101.**—*A.*, ØKLAND **493.**

Arion tricolor, FUENTE, DE LA **249.**

Birulana **gen. n.** for *Hyalinia siraphora* West., LINDHOLM Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** p. 306.

Clathropodium vitrinaeforme West = *Parmacella olivieri* Cuv. var. *ibera* Eichw., LINDHOLM Ann. Mus. Zool. Acad. Sci russ. Petrograd **23** p. 305.

Euconulus, COCKERELL **139** p. 583.—*E.*, HENDERSON **331** p. 145.—*E.*, SOÓS & SCHLESCH **622.**

Gemma, HAZAY **subgen.** *Hyalinia* Math. Termt. Közl. Budapest **19** 1885 p. 333 [omitted from previous Records].

Helicarion resinaceus Hde. subsp. *subresinaceus* **subsp. n.** China, ANNANDALE J. Asiat. Soc. Beng. **19** p. 387.

Hemphillia, HENDERSON **331** p. 152.

Hespararion, HENDERSON **331** p. 152.

Hyalinia roseni Lindh. = *Zonitoides arboreus* Say, LINDHOLM Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** p. 307.—*H.* (*Retinella*) *emigrata* **sp. n.** Transcaspia, LINDHOLM Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** p. 365.—*Hyalinia* (*Retinella*) *sericata* **sp. n.** Transcaucasia, LINDHOLM Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** p. 355.—*H. lucida* var. *obscurata*, DEAN **198.**—*H. glabra*, BOKOR **72.**—*H.*, PALLARY **519** p. 5.

Insulivitrina, HESSE **338.**

Kalliella, ANNANDALE **16** p. 387.

Krynickillus, LINDHOLM **412** pp. 313–315.

Limax cinereo-niger var. *cinereo-viridis*, *tenellus* var. *alba* **varr. n.** Norway, ÖKLAND J. Conch. Leeds **17** 1924 pp. 138–139.—*L. c.*, BOLAM **73.**—*L. fasciatus* WOODWARD **716.**—*L. maxiams*, CROZIER & FEDERIGHI **177.**—*L. m.*, CROZIER & FEDERIGHI **178.**—*L. m.*, CROZIER & PILZ **179.**—*L.*, HENDERSON **331** p. 149.—*L.*, HESSE **338.**—*L.*, IURINIC **355.**

Macrochlamys, ANNANDALE **16** p. 387.

Milax, HENDERSON **331** p. 150.—*M.*, HESSE **338.**—*M.*, TAYLOR **651.**

Parmacella simrothi Germain = *P. olivieri* Cuv. var. *ibera*: *P. anthiops* and *P. antiops* = *P. aethiops* Lindholm, LINDHOLM Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** p. 305.—*P. deshayesi* TORRES[Y] MINGUEZ **666.**—*P.*, HESSE **338.**

Phenacolimax, HESSE **338.**—*P.*, SOÓS & SCHLESCH **622.**

Philomycus, HOFFMANN **341.**

Poecilozonites, with *P. circumfirmatus* **var. n.** *caliban* Bermuda, PEILE Proc. Malac. Soc. **16** pp. 16–21.—*P.* with *P. vanattai* and *P. v. angulifera*, *P. blandi* **spp.** & **subsp. n.** Bermuda, PILSBRY Proc. Acad. Nat. Sci. Philad. **76** pp. 1–9.—*P. peilei* **sp. n.** Bermuda, VANATTA Proc. Acad. Sci. Philad. **76** p. 423.

†*Poecilozonites* sith *P. acutissimus*, *blandi heilprini*, *gulicki*, **spp.** & **subsp. n.** Quaternary Bermuda, PILSBRY Proc. Acad. Nat. Sci. Philad. **76** pp. 1–9.—*P.* with *P. cupuloides*, *haycocki*, *goodei* Pils. var. *carinatus*, *P. circumfirmatus* varr. *trochiformis*, *caliban*, *P. marjoriae* **spp.** & **varr. n.** Quaternary Bermuda, PEILE Proc. Malac. Soc. **16** pp. 16–21.—*P. peilei* **sp. n.** Quaternary Bermuda, VANATTA Proc. Acad. Nat. Sci. Philad. **76** p. 423.

Polita gabrielina **sp. n.** S. California BERRY Nautilus **37** p. 130.—*P.*, COCKERELL **139** p. 583.—*P.*, HENDERSON **331** p. 143.

Pristiloma, HENDERSON **331** p. 149.

Prophysaon, HENDERSON **331** p. 152.

Rhysota mororum, *maxima gigas* **sp.** & **subsp. n.** Philippines, PILSBRY Proc. Acad. Nat. Sci. Philad. **76** pp. 15–16.

Striatura, HENDERSON **331** p. 145.

Trochomorpha, ANNANDALE **16** p. 388.

Vitrea lucida, CARTER C. S. **109.**—*V. l.*, ALKINS **10.**

Vitrina, HENDERSON **331** p. 141.—*V.*, HESSE **338.**

†*Vitrina*, WENZ **701.**

Vitrinopugio, HESSE **338.**

Zacoleus, HENDERSON **331** p. 152.

Zonitoides arboreus, RANDS **571.**—*Z. nitidus*, BUTTERFIELD **101.**—*Z.*, HENDERSON **331** p. 147.

†*Zonitoides silvanus* **sp. n.** Cainozoic Germany, WENZ Jahresber. oberrhein geol. Ver. **1924** p. 182.

HELICIDAE.

†*Archelix ceardi* **sp. n.** Pleistocene N. Africa, PALLARY Bul. Soc. hist. nat. Alger **15** p. 112.

Arianta arbustorum, KENNARD **374.**

Ariantha [*Arianta*] *arbustorum*, ZILL **732** p. 36.

Buliminopsis, ANNANDALE **16** p. 389.

Campylaea, POLIŃSKI **552** pp. 165, 216–221.

†*Canariella disciformis*, WENZ **698.**

Candidula, POLIŃSKI **552** & **554.**

Caracollina, PALLARY **519** p. 7.

†*Caracollina noerdlingensis* **sp. n.** Sarmatian Germany, WENZ Arch. Molluskenkunde **56** p. 16.—*C.*, WENZ **700** & **701.**

Cepaea, POLIŃSKI **552** pp. 147 242–246.

†*Cepaea eversa hoernesi* **nom. n.** for *Helix turonensis* M. Hörnes, WENZ Senckenbergiana **6** p. 222.—*C.*, WENZ **700** & **701.**

Cochlicella, PALLARY **519** p. 17.

Eobania, PALLARY **519** p. 10.

Eremina, PALLARY **518** p. 191 & **519** p. 8.

Ereminella, PALLARY **518** p. 197.

Euhadra, ANNANDALE **16** p. 389.

Eulota with *E. eulemnisca* **sp. n.** E. Siberia, COCKERELL Ann. Mag. Nat. Hist. **13** p. 579.—*E.* with *E. maacki optima* **subsp. n.** & *E. m. o.* **mut. n.** *albida* E. Siberia, COCKERELL Nautilus **38** pp. 62–65.—*E.*, ANNANDALE **16** p. 389.

Eulotella, MARTENS in WEBER, **sub. gen.** *Helix* Zool. Ergebn, Reisen in Neiderl, Ost. Indien **2** 1891 p. 236 [Omitted from previous Records.]

Euomphalia, POLIŃSKI **552** pp. 171 209.

Fruticicola with *F. ezarnohorica, bielzi* subsp. *bakowskii* **sp.** & **subsp. n.** Poland, POLIŃSKI Bul. Intern. Acad. Kraków **1924B** pp. 166, 187–198.

†*Fruticicola transsylvanica* Bielz **var. n.** *banatica* Pleistocene, PETRBOK Arch. Moll. Frankfurt **56** p. 176.

Fruticocampyleea schamyli **sp. n.** Daghestan, LINDHOLM Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** p. 361.

Fruticoconus, MOLLENDORFF **sect.** *Helix* Jahrb. D. Mal. Ges. **9** 1882 p. 184. [Omitted from previous Records.]

Ganesella thaanumi **sp. n.** Japan, PILSBRY Proc. Acad. Nat. Sci. Philad. **76** p. 11.

Helicella heripensis **varr. n.** *carinata, subscalariformis planospira* England, ELLIS J. Conch. Leeds **17** p. 164.—*H. heripensis*, STELFOX **635** and **636.**

Helicidae, ELLIS **218.**

Helicigona arbustorum **var. n.** *pseudorudis* Iceland, SCHLESCH Arch. Moll. Frankfurt **56** p. 212.—*H.* is a syn. of *Chilotrema*, KENNARD & WOODWARD Proc. Malac. Soc. **16** p. 7.—*H.*, POLIŃSKI **552** pp. 159 221–236.

Helicodonta, POLIŃSKI **552** p. 186.

Helicopsis murcica grata, gigaxii arturi **subspp. n.** Spain, HAAS Buttl. Inst. Catal. N. H. Barcelona **4** pp. 51–52.—*H.* with *H. murcica grata, gigaxii arturi* **subspp. n.** Spain, HAAS Arch. Moll. Frankfurt **56** pp. 142–143.

Helix argonautarum **nom. n.** for *H. jasonis* Mouss. (nec Mayer), LINDHOLM Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** p. 313.—*H.* (*Fruticocampylaea*) *aristata* Kryn. **var. n.** *sobrievskii* Caucasus, ROSEN Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** p. 367.—*H. adspersa* [*aspersa*], CIRIA **126.**—*H. aspersa*

BRAMBELL **87.** — *H. a.*, BRAMBELL & GATENBY **88.**—*H. a.* var. *major*, GYNGELL **295.**—*H. a.*, O'MAHONY **499.** —*H. aspera* [*aspersa* ?], STEEL **631.**—*H. bidentata* & *H. ericetorum*, WOODWARD **716.**—*H. hammonis*, CAZIOT **116.** —*H. nemoralis* & *H. hortensis*, KENNARD **374.**—*H. paulini* group, CAZIOT **117.**—*H. pisana* var. *sagittifera*, COCKERELL **140.**—*H. p.*, COCKERELL **138.**—*H. pomatia*, BONNET **74.**—*H. p.*, CATE TEN **111.**—*H. p.*, DUVAL **213.**—*H. p.*, JANISCH **359.**—*H. p.*, PRENANT **564** p. 334.—*H. p.*, SKOWRON **617.**—*H. p.*, ZILL **732** pp. 91 33.—*H.* CIRIA **125.**—*H.*, DORELLO **209** & **210.**—*H.*, HENDERSON **331** p. 100.—*H.*, LINDHOLM **412** pp. 310–311.—*H.*, POLIŃSKI **552** pp. 155 238 242.

†*Helix* (*Camaenopsis*) *daguini* **sp. n.** Miocene Morocco, DOLLFUS, G. F. & DAUTZENBERG J. conchyliol. **68** p. 152. —*H.* with *H.* (*Tachaea*) *etelkae*, *H.* (*Aegista*) *ponticus* Pliocene, HALAVÁTS Magyar Kir. Földt. Évk. Budapest **24** p. 403.—*H.*, GOMEZ **272.**

Helminthoglypta with *H.*, *ferrissi* **sp. n.** California, PILSBRY Nautilus **38** pp. 54–55.

Hygromia, with *H. amatoris*, *notophila*, *kudiensis* **spp. n.** E. Siberia, COCKERELL Ann. Mag. Nat. Hist. **13** p. 581.

Isognomostoma, POLIŃSKI **552** pp. 164 236–238.

Kaznakoviella **subgen. n.** for *Helix* (*Eucampylaea*) *indigena* West., LINDHOLM Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** p. 312.

†*Klikia* (*K.*) *godarti pseudoplanorbis* **nom. n.** for *Helix* (*Gonostoma*) *g.* var. *planorbiformis* Delafond & Dep. 1893, WENZ Senckenbergiana **6** pp. 222–223.

Martha with *M. cereoflava podolica* **subsp. n.** Poland, POLIŃSKI Prace Zool. Pol. Panst. Muz. Przyrod. Warsaw **1** pp. 167–182.—*M.*, POLIŃSKI **552** pp. 174 213–216.

Micrarionta, HANNA **308** pp. 502–505.

Monacha, POLIŃSKI **552** pp. 167 198–209.

Obelus with *O. galalaensis* [**varr. n.** ?] *minor*, *depressa* Egypt, PALLARY J. conchyliol. **68** pp. 205–209.

Oreohelix, HENDERSON **331** p. 109.

Plectotropis, ANNANDALE **16** p. 388.

Polygyra solida, *townsendiana* var. *brunnea*, *populi*, **spp.** & **var. n.** U.S.A., VANATTA Proc. Acad. Nat. Sci. Philad. **76** pp. 25–26.—*P.* (*Triodopsis*) *salmonensis*, PILSBRY **537.**—*P. appressa linguifera* & *Sancta georgiensis*, PILSBRY & VANATTA **547.**—*P. profunda*, WALKER **693.**—*P.*, HENDERSON **331** p. 109.

Polygyrella (*Polygyroidea*) *harfordiana*, PILSBRY **537.**—*P.*, HENDERSON **331** p. 109

Pomatia, PALLARY **518** & **519.**

Pyrenaearia molae **sp. n.** Spain, HAAS Arch. Moll. Frankfurt **56** p. 144.—*P. molae* **sp. n.** Spain, HAAS Buttl. Inst. Catal. N. H. Barcelona **4** p. 53.

Sonorella, HENDERSON **331** p. 100

Tachea hortensis, ZILL **732** p. 36.

Theba chrysomallis, *scrobiculosa* & var. *perforata* **spp.** & **var. n.** Transcaucasia, LINDHOLM Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** pp. 359–361.— *T.*, PALLARY **519.** — T., POLIŃSKI **552** p. 216.

Thysanophora, HANNA **308** p. 505.— *T.*, HENDERSON **311** p. 129.

†*Trichia*, WENZ **700** & **701.**

Trishoplita langfordi **sp. n.** Japan, PILSBRY Proc. Acad. Nat. Sci. Philad. **76** p. 12.

Trochula, PALLARY **518** p. 205.

Turritella, WOLLASTON Test. Atlant. **1878** p. 168. [Omitted from previous Records.]

Vallonia costellata, HAAS **301.**— *V. c.*, LINDHOLM **412** p. 316.—*V. pulchella*, GRENSTED **287.**—*V.*, COCKERELL **139** p. 582.—*V.*, HENDERSON **331** p. 100.

Xerocrassa, PALLARY **518** p. 204.

Xerophila with *X. fourtaui* Pall. [**varr. n.** ?] *depressa, polychroma, X. simulata* Fér. [var. n. ?] *subangulata* Egypt, PALLARY J. conchyliol. **68** pp. 198–205.—*X. hamriana* **sp. n.** Morocco, PALLARY Bul. soc. sci. nat. Maroc. **3** p. 78.—*X.*, PALLARY **519** p. 11.—*X.*, POLIŃSKI **552** pp. 172 210 & **554** pp. 175 182.

Zoögenetes harpa, LINDHOLM **412** p. 309.

ENDODONTIDAE.

Anguispira clarki **sp. n.** Maryland, VANATTA Proc. Acad. Nat. Sci. Philad. **76** p. 423.—*A.*, HENDERSON **331** p. 153.

Gonyodiscus, with *G. clappi, bryanti nigrimontanus, bryantwalkeri* **spp.** & **subsp. n.** Alleghany Mts. PILSBRY Proc. Acad. Nat. Sci. Philad. **76** pp. 417–421.—*G.*, COCKERELL **139** p. 583.—*G.*, HENDERSON **331** p. 153.—*G.*, PILSBRY **540.**

Gyrocochlea **gen. n.** type *Helix vinilincta* Cox with *G. concinna*, Queensland; *G. conferta*, N. S. Wales; *G. convoluta*, Queensland; *G. eurythma, impressa, planorbis, prava*, N. S. Wales **spp. n.**, HEDLEY Austral. Zool. Sydney pp. 215–219.

Helicodiscus HENDERSON **331** p. 156.

Patula with *P. spatiosa* **sp. n.** Ciscaucasus, LINDHOLM Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** pp. 356–358.

Panctum, HENDERSON **331** p. 156.

Pyramidula (*P.*) *rupestris* Drap. **subsp. n.** *przevalskii* W. China, LINDHOLM Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** p. 256.—*P.* (*Gonyodiscus*) *ruderata*, AGUILAR-AMAT **7.**—*P. rotundata* f. *alba*, GODDARD **271.**

Rhophodon **gen. n.** type *R. peregrinus* **sp. n.** & *consobrinus, contortus*, **spp. n.** N. S. Wales, HEDLEY Austral. Zool. Sydney **3** p. 220.

Suteria uticostata **sp. n.** N. S. Wales, HEDLEY Austral. Zool. Sydney **3** p. 221.

ORTHALICIDAE, BULIMULIDAE, CYLINDRELLIDAE.

Amphidromus virescens, WALKER **692.**

Berendtia, HANNA **308** p. 506.

Bulimulus with *B. alternatus hesperius* **subsp. n.** Texas, PILSBRY & FERRISS in FERRISS Nautilus **38** pp. 40–41.—*B.* with *B. santacruzensis, slevini, ceralboensis, johnstoni, chamberlini, ximenez, bakeri*, **spp. n.** Gulf of California, HANNA Proc. Cal. Acad. Sci. **12** pp. 484–502.

Brachypodella BAKER, H. B. **41** p. 7.

Coelocentrum with *C. venduzeei, insulare, oweni, clavigeroi* **spp. n.** Gulf of California, HANNA Proc. Cal. Acad. Sci. **12** pp. 506–513.

Drymaeus, BAKER, H. B. **41** p. 6.

Liguus virgineus, FULTON **250.**

Microceramus bonairensis curacoana **subsp. n.** Curaçoa, BAKER, H. B. Occ. Paprs. Mus. Zool. Ann Arbor **137** p. 6.

Partula martensiana higginsi **subsp. n.** Philippines, PILSBRY Proc. Acad. Nat. Sci. Philad. **76** p. 17.—*P.* with *P. tohiveana, olympia, dendroica, mirabilis* **spp. n.** Society Isds., CRAMPTON Nautilus **37** pp. 109–118 & **169.**

OLEACINIDAE, TESTACELLIDAE.

Cochlicopa, COCKERELL **139** p. 583.—*C.*, HENDERSON **331** p. 140.

Poiretia with *P.* (*Pseudoleacina*) *roseni* **sp. n.** Transcaucasia, LINDHOLM Arch. Moll. Frankfurt **56** pp. 91–95.

PUPIDAE, STENOGYRIDAE, HELICTERIDAE.

†*Abida*, WENZ **700** & **701.**

Acrotomella [**nom. n.**] for *Acrotoma* (Clausiliidae), WOODWARD IN LINDHOLM Proc. Malac. Soc. **16** p. 68 (footnote).

Agardhia with *A. microdonta gracillima* **subsp. n.** E. Rumelia [Bulgaria], PILSBRY Man. Conch. **27** pt. 107 pp. 129–166.

Andinia **subgen. n.** Clausiliidae, POLIŃSKI Bul. Intern. Acad. Kraków **1921** B p. 124.

Austrobalea **gen. n.** type *Balea africana* M. & P., PILSBRY Nautilus **38** p. 6.

Baleopsina **sec. n.** Type *Clausilia retowskii* Bttg., LINDHOLM Proc. Malac. Soc. **16** pp. 66 73.

Buliminus leptoceras West. 1869 = *B. asterabadensis* Kob. 1880, LINDHOLM Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** p. 308.—*B.* with *B.* (*Ena*) *sobrievskii* **sp. n.** Caucasus, ROSEN Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** pp. 367–269.—*B.* (*Subzebrinus*) *korshinskii*, *B.* (*Pseudonapaeus*) *schninikovi* **spp. n.** Russian C. Asia, LINDHOLM Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** pp. 273–274.—*B.* with *B.* (*Subzebrinus*) *tigricolor*, *B.* (*Pupinidius*) *chrysalis*, *B.* (*Petraeomastus*), *latilabrum*. *B.* (*Holcauchen*) *gregoriana*, *tubios* **spp. n.** China, ANNANDALE J. Asiat. Soc. Beng. **19** pp. 389–396.—*B.* (*Zebrina*) *hohenackeri* Kryn **var. n.** *leucolaemus* Ciscaucasus, LINDHOLM Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** p. 358.

†*Buliminus gerundensis*, SOLÁ **620.**

Caecilioides, PALLARY **519** p. 22.

Calaxis, PALLARY **519** p. 20.

Calcariclavis **sec. n.** Type *Clausilia bocki* Sykes, LINDHOLM Proc. Malac. Soc. **16** pp. 62 72.

Caspiophaedusa **sec. n.** Monotype *Clausilia perlucens* Bttg., LINDHOLM Proc. Malac. Soc. **16** pp. 62 72.

Cerion [*vide etiam Strophiops*], BAKER, H. B. **41** p. 7.—*C.*, BARTSCH **43** & **44.**

Cerionidae, MAYNARD **445.**

Chondrina kobelti ordunensis, MOROS **464.**

Chondrula acutior **sp. n.** Transcaucasia LINDHOLM Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** p. 358.—*C.* (*Amphiscopus*) *heptodon* Mts. [**varr. n.** ?] *obeseula*, *minor* Egypt, PALLARY J. conchyliol. **68** pp. 212–213.—*C.*, PALLARY **519** p. 19.

Clausilia cruciata, Stud. **var. n.** *albina*, DEAN J. Conch. Leeds **17** p. 173.

Clausiliidae, DEAN **196.**

†Clausiliidae, LINDHOLM **419** pp. 69–70.

†*Cochlicopa*, WENZ **701.**

Columbinia **subgen. n.** type *Nenia perezi* Jouss. POLIŃSKI Bul. Acad. Sci. Lett. Ser. B. Cracovie **1924** pp. 743–744.

Columella, HENDERSON **331** p. 140.

Creniclavis **subgen. n.** Monotype *Clausilia hueti* Mart., LINDHOLM Proc. Malac. Soc. **16** pp. 67 74.

Dautzenbergiella **sec. n.** Type *Clausilia duella* Mab., LINDHOLM Proc. Malac. Soc. **16** pp. 62 71.

Delima cataphracta (Parr.) var. *albina*, *D. substricta* (Parr.) var. *albina* **varr. n.** Dalmatia, DEAN J. Conch. Leeds **17** p. 172.

Denticularia **sec. n.** Type *Clausilia denticulata* (Oliv.), LINDHOLM Proc. Malac. Soc. **16** pp. 65 73.

Ena, PALLARY **519** p. 18.

Euxinolauria **nom. n.** for *Caucasica* Caz. & Marg., LINDHOLM Proc. Malac. Soc. **16** p. 66 (footnote).

Gastrocopta curacoana, *octonaria*, *barbadensis hojeda* **spp. & subsp. n.** Curaçoa, PILSBRY Proc. Acad. Nat. Sci. Philad. **76** pp. 62–66.—*G.* with *G. rixfordi* **sp. n.** Gulf of California, HANNA Proc. Cal. Acad. Sci. **12** p. 515.—*G.*, HENDERSON **331** p. 130.

†*Gastrocopta*, WENZ **701.**

Graciliaria filograna (Rossm.) **var. n.** *albina* Hungary, DEAN J. Conch. Leeds **17** p. 173.

Gracilinenia **subgen. n.** Clausiliidae, POLIŃSKI Bul. Intern. Acad. Kraków **1921** B p. 125.

Granopupa. PALLARY **519** p. 20.

Heudiella **gen. n.** *Funiculus pars* with *H. oliveriana* **sp. n.** China, ANNANDALE in ANNANDALE & PRASHAD Proc. Malac. Soc. **16** pp. 37–38.

Idylopsina **nom. n.** Type *Clausilia pagana* (Zgl.) Rm., LINDHOLM Proc. Malac. Soc. **16** p. 64.

Illunellaria **sec. n.** Type *Clausilia lessonae* Issel, LINDHOLM Proc. Malac. Soc. **16** pp. 66 73.

Incania **subgen. n.** Clausiliidae, POLIŃSKI Bul. Intern. Acad. Kraków **1921** B p. 125.

Inobseratella **subgen. n.** Monotype *Clausilia lantzi* **sp. n.** LINDHOLM Proc. Malac, Soc. **16** pp. 66 73.

Kuesteriella **subgen. n.** Monotype *Clausilia unidentata* Küst., LINDHOLM Proc. Malac. Soc. **16** pp. 67 74.

Leptinaria, BAKER, H. B. **41** p. 5.

Liparophaedusa **sec. n.** Monotype *Clausilia freyi* Bav. & Dtz., LINDHOLM Proc. Malac. Soc. **16** pp. 62 71.

Marpessa comensis (Shuttl.) **var. n.** *albina* Italy, DEAN J. Conch. Leeds, **17** p. 173.

†*Melanella* with *M. johnsoni* **nom. n.** for *M. gabbiana* Pils. & Johns. HANNA Proc. Cal. Acad. Sci. **13** p. 171.

Miralinda **nom. n.** Monotype *Clausilia mirabilis* A. S., LINDHOLM Proc. Malac. Soc. **16** p. 65.

Multiplicaria **nom. n.** Type *Clausilia duboisi* Charp., LINDHOLM Proc. Malac. Soc. **16** p. 66.

Mundaria **nom. n.** Type *Clausilia munda*, (Zgl.) Rm., LINDHOLM Proc. Malac. Soc. **16** p. 57.

Nenia with *N. wagneri, pusilla, parcecostata, canescens, lubomirskii, eugeniae, cztolemani, jelskii* **spp. n.** Peru, POLIŃSKI Bul. Intern. Acad. Kraków **1921** B pp. 124 127–142. — *N. warszewiczi*, Peru; *N. columbiana* U. S. Colombia **spp. n.**, POLIŃSKI Bul. Acad. Pol. Sci. Lett. Sci. B. Cracovie **1924** pp. 739–743.

Nesopupa, COCKERELL **142.**

Opeas with *O. cavernicola* & var. *vamana* **sp. n.** & **var. n.** India, ANNANDALE & CHOPRA Rec. Ind. Mus. Calcutta **26** pp. 33–40.

Orcula, HESSE **335.**—*O.*, PALLARY **519.**—*O.*, SOÓS **621.**

Pagodulina with *P. pagodula sparsa* **nom. n.** for *Pupa p.* var. *obliqua* West. & *P. subdola sanremoensis* **subsp. n.** N. Italy, PILSBRY Man. Conch. **27** Pt. 107 pp. 166–176.

Peruinia **subgen. n.** Clausiliidae, POLIŃSKI Bul. Intern. Acad. Kraków **1921** B p. 125.

Petraeus fourtaui [**varr. n.** ?] *major, minor, strigata, obesa* Egypt, PALLARY J. conchyliol. **68** pp. 210–211.—*P.*, PALLARY **519** p. 18.

Phaedusa, ANNANDALE in ANNANDALE & PRASHAD **22.**

Plistoptychia **nom. n.** Monotype *Clausilia cilicica* Näg., LINDHOLM Proc. Malac. Soc. **16** p. **67.**

Pontophaedusa **sec. n.** Monotype *Clausilia funiculum* Mouss., LINDHOLM Proc. Malac. Soc. **16** pp. 62 72.

Pravispira **sec. n.** Type *Clausilia semilamellata* Mouss., LINDHOLM Proc. Malac. Soc. **16** pp. 63 73.

†*Procerastus* **nom. n.** for *Pseudopartula* Wenz 1923, WENZ Senckenbergiana **6** p. 223.

Prosopeas troglodytes **sp. n.** Selangor, LINDHOLM Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** p. 281.

Pseudalinda procera (Bielz.) **var. n.** *viridana* Hungary, DEAN J. Conch. Leeds **17** p. 173.

Pupa (*Pupilla*) *diecki* Gredl. = *P. signata* Mouss., LINDHOLM Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** pp. 308–309.—*P. kobelti*, MOROS **464.** —*P. costulata*, WOODWARD **716.**

Pupilla, HENDERSON **331** p. 133.—*P.*, PILSBRY **540.**—*P.*, SCHLESCH **610.**

Pupoides with *P. catalinensis* **sp. n.** Gulf of California, HANNA Proc. Cal. Acad. Sci. **12** p. 513.—*P.*, BAKER, H. B. **41** p. 5.—*P.*, HENDERSON **331** p. 132. —*P.*, PILSBRY **545** p. 61.

Rachisellus, PALLARY **519** p. 20.

Rumina decollata, GARTH **260.**—*R.*, PALLARY **519** p. 20.

Ruthenica **sec. n.** Type *Clausilia filograna* Rm., LINDHOLM Proc. Malac. Soc. **16** pp. 68 74.

Selenophaedusa **sec. n.** Type *Clausilia porphyrostoma* Bav. & Dtz., LINDHOLM Proc. Malac. Soc. **16** pp. 63 72.

Siciliaria septemplicata (Phil.) **var. n.** *albina*, DEAN J. Conch. Leeds **17** p. 172.

Siphonophaedusa **sec. n.** Type *Clausilia grangeri* Bav. & Dtz., LINDHOLM Proc. Malac. Soc. **16** pp. 62 71.

Stenogyra decollata, BOUTAN **84.**

Strophiops [*vide etiam Cerion*] *S. helena* **nom. n.** for *S. glans* Mayn. Contrib. to Science Vol. II 1894 p. 156, MAYNARD Walks Talks with Nature C. J. Maynard West

Newton Mass. **6** 1912 pp. 177–179.—*S. sula, hesternia, devereuxi, fulminea* [**spp. n.** ?] Bahamas, MAYNARD & CLAPP, N. A. Walks Talks with Nature C. J. Maynard West Newton Mass. **6** 1912 pp. 180–182.—*S.* with *S. salinaria, larga, affinis, acceptoria, cinerea-vara, varia-thorndikei, nivia, rediviva, varia-purpurea, purpurea, macularia, delicata, ultima, argentia, agava-neglecta, oberholseri, inconsueta, uniformis, hyattii, multa, obliterata, ornatula, ornatula-clappii, clappii, ornatula-rufina, rufina, tabida* **spp. n.** Bahama Isds., MAYNARD appendix to Records of Walks Talks with Nature C. J. Maynard West Newton Mass. **5** pp. 177–200.

†*Strophiops* with *S. antiqua, primigenia, avita, vetusta-praedivina, praedivina, praedivina-universa, universa, exigua,* **spp. n.** Quaternary Bahama Isds., MAYNARD Appendix to Records of Walks Talks with Nature C. J. Maynard West Newton Mass. **5** pp. 177–200.—*S. thompsoni, morula, caerulea, praedicta, prisca, tenui* [**spp. n.** ?] Quaternary Bahamas, MAYNARD & CLAPP, N. A. Walks Talks with Nature C. J. Maynard West Newton Mass. **6** 1912 pp. 180–182.

Subulina, LINDHOLM **411.**

Trilobella [**nom. n.**] for *Triloba* (Clausiliidae), WOODWARD in LINDHOLM Proc. Malac. Soc. **16** p. 59 (footnote).

†*Triptychia hungarica* **sp. n.** Pliocene HALAVÁTS Magyar Kir. Földt. Évk. Budapest **24** p. 404.—*T.*, WENZ **700.**

Tropidauchenia **sec. n.** Monotype *Clausilia bavayi* **nom. n.** (=*C. dorri*, Bav. & Dautz. var. *cristata*, B. & D. *non C. cristata* Pot. & Mich. 1838 = *C. bergeri* Rm. 1836), LINDHOLM Proc. Malac. Soc. **16** pp. 57–70.

Truncatellina sundleri **sp. n.** Sweden, ODHNER Ark. Zool. Stockholm **16** No. 29 pp. 1–4.

Turanena **nom. n.** for *Pseudonapaeus* Kob. & Mlldff. 1902 Type *Buliminus herzi*. O. Bttg., LINDHOLM Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** p. 275.

Vertigo, GRENSTED **283.**—*V.*, HENDERSON **331** p. 136.—*V.*, PILSBRY **540.**—*V.*, SOÓS & SCHLESCH **622.**

†*Vertigo vectensis* **sp. n.** Oligocene England, COX Proc. Malac. Soc. **16** p. 123.—*V. moulinsiana, alpestris*, JESSEN **366.**

Westerlundella **nom. n.** Type *Clausilia boissieri* Charp., LINDHOLM Proc. Malac. Soc. **16** p. 56.

Zootecus, PALLARY **518** & **519.**

SUCCINEIDAE.

Aneitea (*Triboniophorus*) *sarasini, A.* (*Aneityopsis*) *ehrmanni, simrothi, platei, neocaledonica* New Caledonia; *A.* (*A.*) *elisabethae, speiseri, macdonaldi* Gray var. *maloënsis* New Hebrides **spp.** & **var. n.**, GRIMPE, G. & HOFFMANN Zool. Anz. **58** pp. 171–177.

Succinea with *S. putris olgae*, & *S. p. mera* **subspp. n.** E. Siberia, COCKERELL J. Washington Acad. Sci. **14** pp. 366–369.—*S. putris*, ZILL **732** p. 36.—*S.*, HENDERSON **331** p. 157.—*S.*, PALLARY **519** p. 23.—*S.*, PILSBRY **540.**—*S.*, SOÓS & SCHLESCH **662.**

†*Saccinea avara*, HANNA **307.**

VERONICELLIDAE, ONCIDIIDAE.

Buchanania reticulata, TORRES Y MINGUEZ **669.**

Onchidium [*vide etiam Oncidium*] *floridanum*, CROZIER & AREY **176.**

Oncidium [*vide etiam Onchidium*] FARNIE **226.**—*O.*, Heidermanns **328.**

Vaginula [*vide etiam Vaginulus*] with *V. borelliana, robusta, festae, pulchra, propinqua, lugubris, americana, difficilis, erinacea, morii, absumpta, attenuata, laurentiana, esilicaulis* **spp. n.** S. America, COLOSI An. Mus. Nac. Buenos Aires **31** pp. 487–516.—*V.* with *V. doelli-juradi, ameghini* **spp. n.** Argentina, GAMBETTA Boll. Musei zool. anat. comp. Torino No. 11 **38** pp. 1–15.

Vaginulus [*vide etiam Vaginula*] *sumatranus, johni* **spp. n.** Sumatra, LINDHOLM Ann. Mus. Zool. Acad. Sci. russ. Petrograd **23** pp. 281–282.

Veronicella leydigi, COCKERELL **144.**

INCERTAE SEDIS.

Haplotrema, HENDERSON **331** p. 141.

Scaphopoda.

†*Cadulus meganosensis* **sp. n.** Eocene California, PALMER Univ. Cal. Pub. Zool. **14** p. 303.

†*Dentalium boonei* **sp. n.** Jura. France, COSSMANN Mém. Soc. Geol. Min. Bretagne **1** p. 22.—*D. lentum* **sp. n.** Tertiary Japan, YOKOYAMA Japan J. Geol. Geogr. **2** p. 54.—*D.* with *D. vacavillensis* **sp. n.** Eocene California, PALMER Univ. Cal. Pub. Zool. **14** pp. 302–303.—*D.* WILCKENS **708** p. 543.

Scaphopoda, PALLARY **516** p. 73.

Pelecypoda or Lamellibranchia.

GENERAL.

Pelecypoda, PALLARY **516** p. 75.

PROTOBRANCHIA.

(Includes: *Solenomyidae, Nuculidae, Ledidae, Ctenodontidae, Praecardiidae, Grammysiidae, etc.*)

†*Acila nehalemensis* **nom. n.** for *Nucula* (*A.*) *cordata* Dall., HANNA Proc. Cal. Acad. Sci. **13** p. 155.

†*Arisaigia* with *A. postornata* **var. n.** *brevis* Silurian Nova Scotia, MCLEARN Geol. Surv. Canada. **137** pp. 107–110.

†? *Cardiomorpha bihatiensis* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** p. 261 [403].—*C.*, DEMANET **200** p. 215.

†*Clinopistha* ? *rowleyi* **sp. n.** Devon. Missouri, BRANSON Missouri Bur. Geol. Mines **1922** p. 111.

Comitileda **gen. n.** for *Leda miliacea* Hedley, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 181.

†*Ctenodonta subcircularis, subreniformis, ovata, willsi,* **spp. n.**, SWARTZ & PROUTY Maryld. Geol. Surv. Silur. **1923** pp. 469–471.—*C. ruedemanni* **sp. n.** Silurian New York, EATON New York State Mus. Bul. Albany **253** p. 112.

†*Grammysia kirklandi* **sp. n.** Silurian U.S.A., SWARTZ & PROUTY Maryld. Geol. Surv. Silur. **1923** p. 468.—*G.* with *G. unilira* **sp. n.**; *G. cingulata* **mut. n.** *intermedia, G. macadamensis* **sp. n.** Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** pp. 92–96.—*G.*, BRANSON **89** p. 111.

†*Isoleda* **nom. n.** for *Nuculopsis*, ROLLIER Rev. crit. paléozool. **27** p. 67.

†*Leda acuminata* **sp. n.** Cretaceous Kansas, TWENHOFEL Bul. State Geol. Surv. Kansas **9** p. 72.—*L. denominata* **nom. n.** for *L. milleri* Dick.; *L. polynominata* **nom. n.** for *Corbula gabbii* Dall., HANNA Proc. Cal. Acad. Sci. **13** p. 169.—*L. furlongi* **sp. n.** Tertiary California, TRASK Univ. Cal. Publ. Geol. **13** p. 147.—*L.* with *L. inaequirugata* **sp. n.** Pliocene India, COSSMANN J. conchyliol. **68** pp. 106–108.—*L. megumaensis* **sp. n.** Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** p. 111.—? *L. timorensis* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** p. 235 [377].—*L. yabei* **sp. n.** Tertiary Japan, YOKOYAMA J. Coll. Sci. Tōkyō **45** Art. 3 p. 22.—*L.*, COSSMANN **155** p. 131 & **157** p. 42.

Nucula with *N. praetenta* **nom. n.** for *N. umbonata* Smith, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 184.—*N. tatei* **nom. n.** for *N. semistriata* Tate 1886, FINLAY Proc. Malac. Soc. **16** p. 107.

†*Nucula arisaigensis* **sp. n.** Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** p. 98.—*N. johanseni* **sp. n.** Tertiary Arctic Canada, DALL in O'NEILL Rep. Canad. Arct. Exp. 1913–18 **11** p. 28 A.—*N. lunulicrenata* **sp. n.** Pliocene India, COSSMANN J. conchyliol. **68** p. 105.—*N.* with *N. snyderensis* **sp. n.** Devon. Missouri, BRANSON Missouri Bur. Geol. Mines **1922** p. 112.—*N.* with *N. strigilata* Goldf. var. *timorensis, N. sundaica* **sp.** & **var. n.** Trias Timor, KRUMBECK Pal. Timor **13** pp. 232 [374]—235 [377].—*N.*, COSSMANN **155** p. 131 & **157** pp. 41–42.—*N.*, COX **162** p. 61.—*N.*, HÄGG **302** p. 5.

Nuculana with *N.* (*dohrnii*) *tragulata* **sp. n.** S. E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 184.

†*Nuculana chapmani* **nom. n.** for *N. apiculata* (Tate) 1886, FINLAY Proc. Malac. Soc. **16** p. 107.

†*Nuculites* with *N. concentricus* **var. n.** *subequilatus; N. cawdori* **mut. n.** *rossonia; N. honeymani, novascoticus* **spp. n.** Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** pp. 101–107.

†*Palaeoneilo* with *P. antigonishensis, twenhofeli* **spp. n.** Silurian Nova Scotia, McLearn Geol. Surv. Canada **137** pp. 98–99.—? *P. subtenella, nifukokoensis* **spp. n.** Trias Timor, Krumbeck Pal. Timor **13** pp. 230 [372]—232 [374].

Poroleda with *P. perturbata* **nom. n.** for *P. lanceolata* Hedley, Iredale Proc. Linn. Soc. N.S.W. **49** pp. 185–186.

Propeleda **gen. n.** for *Leda ensicula* Ang., Iredale Proc. Linn. Soc. N.S.W. **49** p. 186.

Solemya, Iredale **352** p. 184.

†*Solemya ? dunnensis* **sp. n.** Eocene California, Palmer Univ. Cal. Pub. Zool. **14** p. 302.

†*Tancrediopsis altistriata, mundiornata, lauta* **spp. n.** Silurian Nova Scotia, McLearn Geol. Surv. Canada **137** pp. 99–101.

†*Yoldia laudabilis* **sp. n.** Tertiary Japan, Yokoyama J. Coll. Sci. Tōkyō **45** Art. 3 p. 22.—*Y. mosei* **sp. n.** Eocene California, Palmer Univ. Cal. Pub. Zool. **14** p. 301.—*Y.* (*Portlandia*) *astoriana* Henderson, Hanna **309** p. p. 185.

†*Zealeda* **gen. n.** with *Z. hamata* **sp. n.** Pliocene N. Zealand, Marwick Proc. Malac. Soc. **16** p. 25.

Filibranchia.

Anomiacea.

†*Anomia corrugata, costulata* **spp. n.** Jura. Poland, Lewinski Mém soc. géol. Paris **24** pp. 61–62.—*A.* with *A. striatella, simplex, costulata* **spp. n.** Tertiary Germany, Steuer Abh. geol. Landesanst. Darmstadt **6** pp. 51–55.—*A.*, Cossmann **155** p. 117.—*A.*, Makiyama **429** p. 22.—*A.*, Marwick **439** p. 191.

Placuna placenta, Pearson **525.**

†*Placunopsis zuberi* **sp. n.** Jura. Poland, Lewinski Mém. soc. géol. Paris **24** p. 62.—*P.*, Cox **162** p. 68.—*P.*, Cossmann **157** p. 26.

Arcacea.

Arca granosa, Prashad in Annandale & Prashad **22.**—*A.*, Iredale **352** p. 186.—*A.*, Oostingh **500.**

†*Anadara* with *A. rectangularis, propeoblonga, A.* (*Scapharca*) *bonneti*, **spp. n.**, Pliocene India, Cossman J. conchyliol. **68** pp. 93–98.

†*Actinodonta mendipensis* **sp. n.** Silurian England, Reed Geol. Mag. **61** p. 27.

†*Arca costellata* **sp. n.** Tertiary Japan, Yokoyama J. Coll. Sci. Tōkyō **45** Art. 2 p. 17.—*A. invalida* **nom. n.** for *A. dalli* Brown and Pilsbry, Hanna Proc. Cal. Acad. Sci. **13** p. 157.—*A. valentula, setoensis*, **spp. n.**, Tertiary Japan, Yokoyama Japan J. Geol. Geogr. **2** pp. 57–58.—*A.*, Cossmann **155** p. 125.—*A.*, Hägg **302** p. 5.—*A.*, Makiyama **429** p. 22.—*A.*, Oostingh **500.**

†*Axinaea*, Cossmann **155** p. 131.

†*Barbatia boonei* **mut. n.** Jura. France, Cossmann Mem. Soc. Geol. Min. Bretagne **1** p. 41.—*B. martini* **sp. n.** Pliocene India, Cossmann J. conchyliol. **68** p. 99.—*B.* with *B. vasseuri* **sp. n.** Eocene France, Cossmann Bul. soc. sci. nat. Nantes **1** pp. 126–128.

†*Beushausenia*, Cossmann **157** pp. 39–40.

†*Cucullaea* with *C.* (?) *cordiformis, C. lirata*, **spp. n.**, Cretaceous California, Packard Univ. Cal. Publ. Geol. **13** pp. 416–417.—*C.* with *C.* ? *gigantea* **sp. n.** Cretaceous Kansas, Twenhofel Bul. State Geol. Surv. Kansas **9** p. 66.—*C. pectunculina* **sp. n.** Pliocene India, Cossmann J. conchyliol. **68** p. 102.—*C.* (*Arca*) *texta* Roemer **var. n.** *breviareata* Jura. Poland, Lewinski Mém soc. géol. Paris **24** p. 71.—*C.*, Cossmann **157** p. 38.

†*Cucullaria*, Cossmann **155** p. 130.

†*Cyrtodonta megambona* Whit., Sardeson **597.**

†*Fossularca*, Cossmann **155** pp. 129–130 & **156** p. 101.

†*Limopsis silveradoensis* **sp. n.** Cretaceous California, Packard Univ. Cal. Publ. Geol. **13** p. 419.—*L. aurita*, Marwick **436.**

Lissarca, Iredale **352** p. 186.

†*Macrodon subesinensis* **sp. n.** Trias Timor, Krumbeck Pal. Timor **13** p. 237 [379].

†*Myophoria sub-elegans* Waagen **var. n.** *tobai* Permian Japan, HAYASAKA Japan. J. Geol. Georgr. **2** p. 109.—*M.* with ? *M. timorensis, nifukokoensis,* **spp.n.,** Trias Timor, KRUMBECK Pal. Timor **13** pp. 238 [380]–242 [384].—*M.*, COX **162** p. 79.

†*Myophoricardium,* COX **162** p. 81.

†*Myophoriopis jordanensis* **sp. n.** Trias Palestine, COX Ann. Mag. Nat. Hist. **14** p. 82.

Neotrigonia with *N. gemma* **sp. n.** N. S. Wales, IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 192–193.

†*Parallelodon gnoma* **var.** *rhomboidior, P. douxense* **sp.** and **var. n.** Jura. France, COSSMANN Mém. Soc. Géol. Min. Bretagne **1** pp. 38–39.—*P. sibiricus* **sp. n.** Carbon. Siberia, YANICHEVSKY Mém Com. Geol. Petrograd **107** pp. 53, 93.—*P.*, DEMANET **200** p. 209.

Parallepipedum, GHOSH **268.**

†*Pectunculus crenatocinctus, P.* (*Axinaea*) *bonneti,* **spp. n.,** Pliocene India, COSSMANN J. conchyliol. **68** pp. 103–104.—*P.*, HÄGG **302** p. 6.

†*Prosogyrotrigonia* **subgen. n.** *Trigonia* with *P. timorensis* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** pp. 244 [386]–248 [390].

†*Schizodus,* BRANSON **89** p. 113.

†*Trigonarca californica, excavata, sectilis,* **spp. n.,** Cretaceous California, PACKARD Univ. Cal. Publ. Geol. **13** pp. 418–419.

†*Trigonia amudariensis, ferganensis, Romanovskii, crenulata* Lam. subsp. *turkestanensis, T. chivensis, turcmenensis, pseudoindica, turkestanensis, syrdariensis, sultan-Uisi, Weberi,* **spp.** and **subsp. n.,** Upper Cretaceous Turkestan, ARKHANGUELSKI Mem. Com. Geol. Petrograd **152** pp. 20–32.—*T.* with *T. toyamai, sawatai, naumanni, neumayri,* **spp. n.,** Cretaceous Japan, YEHARA Japan. J. Geol. Geogr. **2** pp. 59–84.—*T.*, COSSMANN **157** p. 42.—*T.*, COX **161.**—*T.*, HÄGG **302** p. 6.—*T.*, NEWTON **479** p. 145.—*T.* REAGAN **573** p. 186.

MYTILACEA.

Amygdalum beddomei **nom. n.** for *Modiolus arborescens* auct., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 181.

†*Actinopteria,* BRANSON **89** p. 152.—*A.*, STEWART in BRANSON **89** pp. 252–253.

Brachyodontes, IREDALE **352** p. 196.

†*Daonella* with *D. pickleri* v. Mojs. **var. n.** *timorensis* Trias Timor, KRUMBECK Pal. Timor **13** pp. 113 [255]–126 [268].—*D.*, COX **162** p. 64.

Fluviolanatus **gen. n.** for *Modiolarca subtorta* Dunk., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 181.

Gaimardia, IREDALE **352** p. 198.

†*Gervilleia* [*Vide etiam Gervillia*] with *G. subpannonica, scythica, koatensis,* **spp. n.,** Trias Timor, KRUMBECK Pal. Timor **13** pp. 170 [321]–182 [324].

†*Gervillia* [*Vide etiam Gervilleia*], COSSMANN **157** p. 34.

†*Goniophora,* BRANSON **89** p. 114.

†*Halobia* with *H. superba* v. Mojs. **var. n.** *timorensis* Trias Timor, KRUMBECK Pal. Timor **13** pp. 126 [268]–178 [320].

†*Hormomya hardingensis* **sp. n.** Cretaceous California, PACKARD Univ. Cal. Publ. Geol **13** p. 423.

†*Inoceramus* with *I. amudariensis* **sp. n.** Upper Cretaceous Turkestan, ARKHANGUELSKI Mem. Com. Geol. Petrograd **152** pp. 10–18.—*I.* with *I. scutulatus, procerus* **spp. n.,** [Cretaceous] Queensland, WHITEHOUSE Proc. R. Soc. Queensland **35** p. 128.—*I.* with *I. iwajimensis, akamatsui,* **spp. n.,** Cretaceous Japan, YEHARA Japan J. Geol. Geogr. **3** pp. 36–38.—*I.*, COSSMANN **157** p. 35.—*I.*, HÄGG **302** p. 7.—*I.* NEWTON **479** pp. 146–147.

Isognomon, IREDALE **352** p. 190.

†*Leiopteria* [*Vide etiam Liopteria*], BRANSON **89** p. 153.—*L.*, DEMANET **200** p. 199.

†*Leptodesma subrhomboidea, acadiensis,* **spp. n.,** Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** p. 118.—*L.*, BRANSON **89** p. 151.

†*Liopteria* [*Vide etiam Leiopteria*] with *L.? pennsylvanica* **sp. n.** Silurian U.S.A., SWARTZ & PROUTY Maryld. Geol. Surv. Silur. **1923** pp. 476–478.

†*Lithodomus,* DEMANET **200** p. 208.

†*Lithophagus interrogatum* **sp. n.** Cretaceous Kansas, TWENHOFEL Bul. State Geol. Surv. Kansas **9** p. 74.

Modiola [*Vide etiam Modiolus*] *lacustris*, PRASHAD in ANNANDALE & PRASHAD **22**.

†*Modiola menzeli* **sp. n.** Jura. Tanganyika Territory, HENNIG Mon. Geol. Pal. Berlin **2** p. 54.—*M.*, COSSMANN **155** p. 123 and **157** p. 37.—*M.*, WAGNER **690**.

†*Modiolaria* with *M. mediodivisa* **sp. n.** Eocene France, COSSMANN Bul. soc. sci. nat. Nantes **1** pp. 125–126.

†*Modiolopsis* with *M. gregarias, cumberlandicus*, **spp. n.**, Silurian U.S.A., SWARTZ & PROUTY Maryld. Geol. Surv. Silur. **1923** pp. 478–481.—*M.* with *M. haliburtoni, M. rhomboidea* var. *eurymyellaforme, M. rossonia, latouri*, **spp.** & **var. n.**, Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** pp. 124–128.

Modiolus [*Vide etiam Modiola*] with *M. delinificus* **nom. n.** for *M. albicostus* Auct., IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 181, 196–197.

†*Modiolus gabbi subconvexus, M. veronensis* **var.** & **sp. n.** Tertiary. California, TRASK Univ. Cal. Publ. Geol. **13** pp. 149–150.—*M. complicatus* **nom. n.** for *M.* (*Lithodomus* ?) *inflata* Whitfield; *M., trinominata* **nom. n.** for *M. inflatus* Dall, HANNA Proc. Cal. Acad. Sci. **13** p. 171.

†*Modiomorpha missouriensis* **sp. n.** Devon. Missouri, BRANSON Missouri Bur. Geol. Mines **1922** p. 114.

†*Myalina*, COX **162** p. 73.

†*Myoconcha Joannis Wanneri* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** p. 228 [370].—*M.*, COSSMANN **157** p. 35.—*M.*, COX **162** p. 77.

Musculus, IREDALE **352** p. 197.

†*Mytilarca amii* **sp. n.** Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** p. 123.

Mytilus africanus, LAMY **395.** — *M. edulis*, ACKERMANN **2.**—*M. e.*, RÖZSENYI **593.**—*M.*, CARTER, G. S. **110.**—*M.*, CIRIA **125.**—*M.*, IREDALE **352** p. 195.—*M.*, NELSON **477.**

†*Mytilus luciferus, takiensis*, **spp. n.**, Tertiary Japan, YOKOYAMA J. Coll. Sci. Tōkyō **45** Art. 3 pp. 19–20.—*M.*, COSSMANN **155** pp. 122–123 & **157** p. 37.—*M.*, COX **161** p. 176 & **162** p. 75.—*M.*, MAKIYAMA **429** p. 24.

†*Perna*, COSSMANN **155** p. 122.

†*Posidoniella*, HAYASAKA **314** p. 57.

Pteria, IREDALE **352** p. 190.

†*Pteria*, HÄGG **302** p. 6.

†*Pteronitella* with *P. altiformis, compressiformis, P.* ? *beechhillensis*, **spp. n.**, Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** pp. 119–123.—*P.*, TANSEY in BRANSON **89** p. 205.

†*Pteroperna africana* **sp. n.** Tanganyika Territory, HENNIG Mon. Geol. Pal. Berlin **2** p. 87.—*P.*, COSSMANN **157** p. 34.

†*Pyrgamidia timorensis* & varr. *striata, obliqua* **sp.** & **varr. n.** Trias Timor, KRUMBECK Pal. Timor **13** pp. 208 [350]–213 [355].

†*Reubenia* **gen. n.** (Pteriidae) with *R. hesbanensis, attenuata*, **spp. n.**, Trias Palestine, COX Ann. Mag. Nat. Hist. **14** pp. 61–64.

†*Septifer eremai* **sp. n.** Cretaceous Tripoli, PARONA Mem. Serv. Descr. Cart. Geol. Ital. **8** p. 18.

†*Timoria* **subgen. n.** with *T. timorensis* & var. *major, subtimorensis, timorensiformis, nifukokoensis, broweri, sundaica*, **spp.** & **var. n.** Trias Timor, KRUMBECK Pal. Timor **13** pp. 218 [360]–228 [370].

Solamen **gen. n.** Mytilidae with *S. rex* **sp. n.** S. E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 198.

Trochomusculus **gen. n.** for *Lithodomus barbatus* Rve., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 181.

†*Volsella*, COX **162** p. 75.

Vulsella, IREDALE **352** p. 191.

PECTINACEA.

†*Aequipecten* with *A. vexilloides, tjaringinensis* [Martin] var. *karikalensis, A. martini*, **spp.** & **var. n.**, Pliocene India, COSSMANN J. conchyliol. **68** pp. 87–90.—*A.*, BORISSIAK & IVANOFF **78** p. 27.

†*Amussium hathabensis* **sp. n.** Tertiary India, DAS-GUPTA J. Asiat. Soc. Beng. **19** p. 81.

†*Aucella*, KRUMBECK **387.**

Avicula lepsiusi **sp. n.** Tertiary Germany, STEUER Abh. geol. Landesanst. Darmstadt **6** p. 63.—*A. rotundata* **sp. n.** Jura. Poland, LEWINSKI Mém. soc. géol. Paris **24** p. 52.—*A. oldroydii* **sp. n.** Cretaceous Montana, REAGAN Pan-Amer. Geol. **41** p. 186.—*A. oxytoma inaequivalvis*, GILLET **270.**—*A.*, COSSMANN **157** p. 35.

†*Aviculopecten leggei, fusiformis, pyriformis, andrewsi, sparteus, perobliquatus, argutus, flexicostatus, pincombei, plicatilis*, **spp. n.**, Carbon. N. S. Wales, MITCHELL Proc. Linn. Soc. N.S.W. **49** pp. 468–473.—*A.* with *A. schwemanni* **sp. n.** Devon. Germany, WULFF Jahrb. Geol. Landesanst. Berlin **43** pp. 55–58.—*A. tenuiconcentricus* **sp. n.** Carbon. Siberia, YANICHEVSKY Mém Com. Géol. Petrograd **107** pp. 57, 94.—*A. uralicus* **sp. n.** Upper Palaeozoic Russia, FRÉDÉRIX Mém. Com. Géol. Petrograd **109** p. 30.—*A.*, DEMANET **200** p. 200.—*A.*, STEWART in BRANSON **89** p. 253.—*A.*, TANSEY in BRANSON **89** p. 205.

†*Aviculoperna*, COSSMANN **155** p. 121.

†*Berthelinia*, COSSMANN **155** p. 119.

Chlamys, IREDALE **352** p. 194.

†*Chlamys* with *C. boonei* **sp. n.** Jura. France, COSSMANN Mém. Soc. Geol. Min. Bretagne **1** pp. 28–29.—*C. ickei* **sp. n.** Pliocene India, COSSMANN J. conchyliol. **68** p. 91.—*C. kaiparaensis* **nom. n.** for *Pecten subconvexus* Marsh. 1918, FINLAY Proc. Malac. Soc. 16 p. 105.—*C. oamarutica, grangei*, **spp. n.**, Tertiary N. Zealand, MURDOCH Trans. Proc. N. Zeal. Inst. **55** pp. 158–159.—*C.* with *C. tauroperstriata* Sacco **var. n.** *spinosa* and *C. middlemissi* **sp. n.** Tertiary India, DAS-GUPTA J. Asiat. Soc. Beng. **19** pp. 83–85.—*C.*, BORISSIAK & IVANOFF **78** p. 11.—*C.*, COSSMANN **155** p. 120.

†*Conocardium*, BRANSON **89** pp. 112, 152.—*C.*, DEMANET **200** p. 209.—*C.*, TANSEY in BRANSON **89** p. 205.

†*Ctenostreon proboscideum* Sow. **var. n.** *raricostatum* Jura. Poland, LEWINSKI Mém. soc. géol. Paris **24** p. 58.

†*Entolium*, BORISSIAK & IVANOFF **78** p. 1.

†*Eupecten*, BORISSIAK & IVANOFF **78** p. 27.

†*Glyptodesma*, BRANSON **89** p. 150.

†*Limopteria*, BRANSON **89** p. 134.

Lima with *L. nimbifer* **sp. n.** N. S. Wales, IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 194–195.

†*Lima* with *L.* (*Radula*) *baungensis* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** pp. 184 [326]–187 [329].—*L. mestayerae* **sp. n.** Pliocene N. Zealand, MARWICK Trans. Proc. N. Zeal. Inst. **55** p. 192.—*L. subnodosa* **sp. n.** Cretaceous California, PACKARD Univ. Cal. Publ. Geol. **13** p. 421.—*L. yumotoensis* **sp. n.** Tertiary Japan, YOKOYAMA J. Coll. Sci. TŌKYŌ **45** Art. 3 p. 20.—*L.*, COSSMANN **155** p. 120.—*L.*, COX **162** p. 71.—*L.*, HÄGG **302** p. 7.—*L.*, MAKIYAMA **429** p. 24.—*L.*, STEUER **639** p. 60.

†*Limatula*, COSSMANN **155** p. 121 and **157** p. 33.

†*Neithea*, HÄGG **302** p. 9.

Pecten, BLAKE **61.**—*P.*, CISNEROS, DE **127.**—*P.*, HAYNES **315.**—*Pecten irradians*, HOPKINS **346.**—*P.*, IREDALE **352** p. 193.

†*Pecten binominatus* **nom. n.** for *P.* (*Pseudamusium*) *andersoni* Dall; *P. calamitus* **nom. n.** for *P.* (*Propeamusium*) *levis* Moody; *P. diabloensis* Clark **nom. n.** for *P. gabbi* Clark; *P. invalidus* **nom. n.** for *P.* (*Plagioctenium*) *cooperi* Arnold; *P. impostor* **nom. n.** for *P. proteus* Nomland, HANNA Proc. Cal. Acad. Sci. **13** pp. 175–177.—*P.* (*Chlamys*) *dujardini* Roem. *perornata* **mut. n.** Cretaceous Madagascar, COTTREAU Ann. paléont. Paris **11** p. 141.—*P.* with *P. lahuseni, subambiguus, nalivkini, socolowi, donezianus*, **spp. n.** Jura. Russia, BORISSIAK & IVANOFF Mém. Com. Géol. Petrograd **143** pp. 1, 11.—*P.* with *P.* (*Chlamys*)? *rothpletzi*, *P.* (? *Aviculopecten*) *subloczyi*, *P.* (? *Entolium*) *decoratiformis*, *P.* (*Chlamys*) *subdextilis, coronatiformis*, *P.* (*Aequipecten*) *subserraticosta, seinaamensis*, **spp. n.**, Trias Timor, KRUMBECK Pal. Timor **13** pp. 188 [330]–203 [305].—*P.* (*Propeamusium*) *vacavillensis* **sp. n.** Eocene California, PALMER Univ. Cal. Pub. Zool. **14** p. 301.—*P.* (*Lyropecten*)

vickeryi ; P. (*P.*) *raymondi brionianus, P.* (*P.*) *andersoni gonicostus* **sp.** & **varr. n.** Tertiary California, TRASK Univ. Cal. Publ. Geol. **13** pp. 148–149.—*P. yagurai, halimensis,* **spp. n.,** Pliocene Japan, MAKIYAMA Japan J. Geol. Geogr. **2** p. 23.—*P.* CHECCHIA-RISPOLI **122.**—*P.*, COX **162** p. 68 and **163** p. 58. —*P.*, HÄGG **302** p. 7.

†*Plagiostoma* with *P. callovicum* **sp. n.** Jura. France, COSSMANN Mém. Soc. Geol. Min. Bretagne **1** pp. 31–33.—*P. subpunctatoides* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** p. 183 [325].

†*Plesiopecten,* COSSMANN **157** p. 27.

†*Plicatula* with *P.* ? *boonei* **sp. n.** Jura. France, COSSMANN Mém. Soc. Geol. Min. Bretagne **1** pp. 26–27.—*P.* with *P.* (?) *ferganensis* **sp. n.** Upper Cretaceous Turkestan, ARKHANGUELSKI Mem. Com. Geol. Petrograd **152** pp. 5–10.—*P.* with *P. moabensis* **sp. n.** Trias Palestine, COX Ann. Mag. Nat. Hist. **14** pp. 66–67.—*P.*, COSSMANN **155** p. 118.

†*Prospondylus,* COSSMANN **157** p. 27.

†*Pseudamusium corneum,* WRIGLEY **719.**—*P.*, DEMANET **200** p. 207.

†*Pseudomonotis* with *P.* (*Claraia*) *subaurita, intermediaeformis, P. australasiatica, subconvexa,* **spp. n.,** Trias Timor, KRUMBECK Pal. Timor **13** pp. 92 [234]–106 [248].

†*Pterinea emacerata* var. *arisaigensis, prominiradiata, antigonishensis, twenhofeli, marklandensis, amii, northumberlandensis, gesneri, stonehousensis,* **var.** & **spp. n.,** Silurian Nova Scotia. MCLEARN Geol. Surv. Canada **137** pp. 113–119.—*P.* with *P. flintstonensis, elongata, cancellata,* **spp. n.,** Silurian U.S.A., SWARTZ & PROUTY Maryld. Geol. Surv. Silur. **1923** pp. 473–476.—*P.* with *P. rotunda, jordani,* **spp. n.,** Silurian New York, EATON New York State Mus. Bul. Albany **253** p. 113.—*P.*, BRANSON **89** p. 149.

†*Pterinopecten serdobovae, krotovi, licharevi, pseudoradiatus,* **spp. n.** Upper Palaeozoic Russia, FRÉDÉRIX Mém. Com. Géol. Petrograd **109** pp. 25–26, 28–29.—*P.*, DEMANET **200** p. 204.

†*Semiplicatula,* COSSMANN **155** p. 119.

†*Spondylus fucatus* **nom. n.** for *S. striatus* Pack., HANNA Proc. Cal. Acad. Sci. **13** p. 181.—*S. striatus, rugosus,* **spp. n.,** Cretaceous California, PACKARD Univ. Cal. Publ. Geol. **13** p. 422.—*S.*, COSSMANN **155** p. 119.—*S.*, HÄGG **202** p. 9.

†*Streblopteria* (?) *krasnoufimskensis, hindiana,* **spp. n.,** Upper Palaeozoic Russia, FRÉDÉRIX Mém. Com. Géol. Petrograd **109** pp. 33–34.—*S.*, DEMANET **200** p. 206.

†*Syncyclonema,* COSSMANN **157** p. 30.

DIMYACEA.

†*Dimyodon intusstriatum* **sp. n.** Rhaetic. Italy, STEFANINI Bol. Soc. geol. ital. **42** p. 55.—*D. subrichthofeni* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** p. 205 [347.]

EULAMELLIBRANCHIA.

OSTRAEACEA.

†*Alectryonia destefanii* **sp. n.** Cretaceous Tripoli, PARONA Mem. Serv. Descr. Cart. Geol. Ital. **8** p. 36.—*A.*, COSSMANN **157** p. 24.

Atrina with *A. tasmanica* **var. n.** *dumosa* S. Australia, HEDLEY Rec. Austr. Mus. **14** pp. 141, 149–153.

†*Atrina,* HEDLEY **326** p. 143.

†*Ctenostreon,* COSSMANN **157** p. 30.

†*Exogyra* with *E. bigoti, welschi, alata* Jurassic France ; *E. suprareticulata, lemeslei* Cretaceous N. Africa, **spp. n.,** JOURDY Ann. paléont. Paris **13** pp. 52–81.—*E. inornata, californica,* **spp. n.,** Cretaceous California, PACKARD Univ. Cal. Publ. Geol. **13** pp. 420–421. —*E. virguloides, decipiens,* **spp. n.,** Jura. Poland, LEWINSKI Mém. soc. géol. Paris **24** pp. 66–67.—*E.*, COSSMANN **157** p. 24.—*E.*, NEWTON **479** p. 144.

Gryphaea, LAMY **394** p. 318.

†*Heligmus,* COSSMANN **157** p. 25.—*H.*, COX **161** p. 175.

†*Liogryphaea,* COSSMANN **157** p. 23.

†*Lopha,* COX **162** p. 65.—*L.*, NEWTON **479** p. 143.

†*Mysidioptera,* COX **162** p. 72.

Notolimea **gen. n.** for *Lima australis* Smith, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 181.

Ostrea edulis, LEENHARDT **402.**—*O. e.* MAZZARELLI **447** & **448.**—*M. e.*, ORTON **505.**—*O. e.*, RÖZSENYI **593.**—*O. vesicu-*

laris, HALLEZ **305.**—*O. virginica*, NELSON **478.**—*O.*, IREDALE **352** pp. 191–192.—*O.*, LAMY **394.**—*O.*, NELSON **477.**—*O.*, ROUGHLEY **592.**

†*Ostrea arizpensis* Böse **var. n.** *jamaicensis* Cretaceous Jamaica, TRECHMANN Geol. Mag. **61** p. 408.—*O.* (*Alectryonia*) *bornhardti* **sp. n.** Tanganyika Territory HENNIG Mon. Geol. Pal. Berlin **2** p. 55.—*O.* with *O.* (*Cubitostrea*) *karikalensis* **sp. n.** Pliocene India, COSSMANN J. conchyliol. **68** pp. 85–87.—*O. crescentica, taxidonta,* **spp. n.,** Cretaceous, California, PACKARD Univ. Cal. Publ. Geol. **13** p. 420.—*O. expansa* Sow. **var. n.** *quadrata* Jura. Poland, LEWINSKI Mém. soc. géol. Paris **24** p. 64.—*O. jabbokensis, israelis,* **spp. n.,** Jura. Palestine, COX Ann. Mag. Nat. Hist. **13** pp. 172–195.—*O.* with *O. kiowana* **sp. n.** Cretaceous Kansas, TWENHOFEL Bul. State Geol. Surv. Kansas **9** pp. 77–78.—*O. oregonensis* **sp. n.** Eocene Oregon, PACKARD Univ. Oregon Publ. **2** pp. 1–14.—*O. mundana, takiana,* **spp. n.,** Tertiary Japan, YOKOYAMA J. Coll. Sci. Tōkyō **45** Art. 3 p. 21.—*O. gryphoides*, BROWN, J. C., **93.**—*O.*, COSSMANN **155** pp. 117–118 & **157** p. 24.—*O.*, COX **163** p. 56.—*O.*, HÄGG **302** p. 10.—*O. corrugata* Nomland, HANNA **309** p. 174.—*O.*, JOURDY **371** p. 56.—*O.*, REAGAN **573** p. 189.—*O.*, MAKIYAMA **429** p. 24.

Pinna with *P. isosceles* New S. Wales; *P. menkei* var. *caviterga* Queensland; *P. scapula* Northern Territory Australia, **spp.** & **var. n.** HEDLEY Rec. Aust. Mus. **14** pp. 141–149. — *P., pectinata*, LIOUVILLE **420.**

†*Pinna* with *P.* (*Atrina*) *subtilecostata* **sp. n.** Jura. France, COSSMANN Mém. Soc. Geol. Min. Bretagne **1** p. 36. — *P.*, COSSMANN **155** p. 122. — *P.*, COSSMANN **156** p. 92.—*P.*, HEDLEY **326** p. 143. — *P.*, MURDOCH **468.** — *P.* with *P. hassiaca, moenana,* **spp. n.,** Tertiary Germany, STEUER Abh. geol. Landesanst. Darmstadt **6** pp. 43–50.

SUBMYTILACEA.

†*Anisocardia recki* **sp. n.** Tanganyika Territory, HENNIG Mon. Geol. Pal. Berlin **2** p. 109.

Anodonta cygnaea var. *incrassata*, BUTTERFIELD **101.**—*A. c.*, DUVAL **213.**—*A. c.*, STENGEL **637.**—*A. imbecilis*, ALLEN **11.**—*A. piscinalis*, WOODWARD **716.**—*A.*, DOMET DE VORGES **208.**—*A.*, GRIER **290.**—*A.*, HENDERSON **331** p. 85.—*A.*, MODELL **460.**—*A.*, PRASHAD in ANNANDALE & PRASHAD **22.**

†*Anodonta*, BOGATCHEV **71** pp. 142–143.

Anodontites flucki **sp. n.** Nicaragua, WALKER Nautilus **38** p. 52.

Anodontoides, HENDERSON **331** p. 88.—*A.*, NICODIM **481** p. 29.

†*Anodontophora*, COX **162** p. 75.

Amesoda, KENNARD & WOODWARD **378** p. 132.

Arcidopsis, HAAS **296** p. 192.

Arconaia, HAAS **296** p. 161.

†*Astarte* ? *acerba* **nom. n.** for *A.* ? *sulcata* Pack., HANNA Proc. Cal. Acad. Sci. **13** p. 157. — *A.* with *A. fournieri* var. *boonei, A douxensis, coufloni* **var.** & **spp. n.,** Jura. France, COSSMANN Mem. Soc. Geol. Min. Bretagne **1** p. 45.—*A. lapidis, ovoides, A.*? *sulcata,* **spp. n.,** Cretaceous California, PACKARD Univ. Cal. Publ. Geol. **13** pp. 423–424.—? *A.*, COSSMANN **156** p. 120.—*A.*, STEUER **639** p. 62.—*A. filigera*, WRIGLEY **719.**

Bathycardita **gen. n.** for *Cardita raouli* Ang., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

Bornia, IREDALE **352** p. 207.

Borniola **gen. n.** for *Bornia lepida* Hed., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

†*Burmesia* with *B.* ? *posteroradiata* **sp. n.** Trias Palestine, COX Ann. Mag. Nat. Hist. **14** pp. 84–86.

Cardita, IREDALE **352** p. 204.

†*Cardita*, STEFANINI **632** p. 56.

Carunculina, ORTMANN **503** p. 100.

Chamberlainia, HAAS **296** p. 179.

Contradens, HAAS **296** p. 197.

Corbicula with *C.* (*Cyanocyclas*) *circularis, compacta, delicata, exquisita, felipponei, fortis, paysanduensis,* **spp. n.** Uruguay, MARSHALL W. B., Proc. U. S. Nat. Mus. **66** pp. 1–10.—*C.*, PALLARY **519** p. 37.—*C.*, PRASHAD in ANNANDALE & PRASHAD **22.**—*C.*, PRASHAD **559** p. 424 and **560.**

†*Corbicula anderssoni, jeholense*, **spp. n.** Cretaceous China, GRABAU Bul. Geol. Surv. China **5** pp. 188–190.—*C.* with *C.* ? *elongata* **sp. n.** Cretaceous Kansas, TWENHOFEL Bul. State Geol. Surv. Kansas **9** pp. 64–65.—*C. fluminalis* **var. n.** *apscheronica* Pleistocene, ANDRUSSOV Mém. Com. Géol. Petrograd **110** p. 117.—*C.*, MAKIYAMA **429** p. 25.

†*Corbis unioides* **sp. n.** Jura. Poland, LEWINSKI Mém. soc. géol. Paris **24** p. 78.

Costatella, KIMAKOWICZ Verh. Siebenb. Ver. Naturv **40** 1890 p. 78 [Omitted from previous Records.]

†*Crassatella caudifera, dimorphorugata C.* (*Crassinella*) *bonneti, pachyrhytidea*, **spp. n.**, Pliocene India, COSSMANN J. conchyliol. **68** pp. 115–119.—*Crassatella*, COSSMANN **155** pp. 135–136.—*C.*, HÄGG 302 p. 16.

Crassatellites bellulus, POWELL **556.**—*C.*, IREDALE **352** p. 202.

†*Crassatellites lomitensis* **sp. n.** Pleistocene California, OLDROYD, I. S. Bul. S. Cal. Acad. Sci. **23** p. 10.—*Crassatellites dalli* Weaver, HANNA **309** p. 164.—*C.*, REAGAN **573** p. 185.

Ctenodesma, HAAS **296** p. 193.

Cuneopsis, HAAS **296** p. 146.

†*Cymatocyclus diacis* **sp. n.** Tertiary Arctic Canada, DALL in O'NEILL Rep. Canad. Arct. Exp. 1913–18 **11** p. 28A.

†*Cypricardinia*, TANSEY in BRANSON **89** p. 206.

†*Cyprina* (*Venilicardia*) *perrieri* **sp. n.** Cretaceous Madagascar, COTTREAU Ann. paléont. Paris **11** p. 155.

†*Cyrena* (*Corbicula*) *diabloensis* **sp. n.** Tertiary California, TRASK Univ. Cal. Publ. Geol. **13** p. 150.—*C. kiveichonensis hupehensis*, **spp. n.**, Cretaceous C. China, GRABAU Bul. Geol. Surv. China **5** pp. 216–218.—*C.* (*Sphaerium* ?) *tani*, *C.* (*Pisidium* ?) *shantungense*, *C.* (*P.*?) *wangshihense*, *C.* (*P.*) *retrorostrum*, *C.* (*P.*) *altiformis*, **spp. n.**, Cretaceous China, GRABAU Bul. Geol. Surv. China **5** pp. 153–159.

Diaurora, HAAS **296** p. 187.

Diplodonta, IREDALE **352** p. 206.

Discomya, HAAS **296** p. 196.

†*Divaricella* with *D. rapa* **sp. n.** Pliocene India, COSSMANN J. conchyliol. **69** p. 120.

Dreissensia polymorpha, OTTERSTRØM **508.**

†*Dreissensia rostriformis* varr. *subgibba, gibboides, similis*; *D. anisoconcha* var. *tortuosa*, *D. isseli*, *D. polymorpha* var. *incrassata* **varr.** & **sp. n.** Pleistocene, ANDRUSSOV Mém. Com. Géol. Petrograd **110** pp. 50–56.

Elliptio, GRIER **290.**

Erycina, IREDALE **352** p. 207.

†*Erycina*, COSSMANN **155** p. 139.

Eucrassatella **gen. n.** for *Crassatella kingicola* Lk., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 181.

Eupera, PALLARY **519** p. 40.

Gonidea, HENDERSON **331** p. 88.

†*Gonodus* with *G. giganteus, timorensis*, **spp. n.**, Trias Timor, KRUMBECK Pal. Timor **13** pp. 254 [396]–358 [400], 263 [405].

†*Here* (*Pleurolucina*) *inopinata* **sp. n.** Pliocene India, COSSMANN J. conchyliol. **68** p. 123.

Hyriopsis, PRASHAD in ANNANDALE & PRASHAD **22.**—*H.*, HAAS 296 p. 165.

†*Isocardia substriata* **sp. n.** Tanganyika Territory, HENNIG Mon. Geol. Pal. Berlin **2** p. 67.

†*Kellya* with *K.* (*Divarikellya*) *allixi* **sp. n.** Eocene France, COSSMANN Bul. soc. sci. nat. Nantes **1** p. 138.

Lamellidens, PALLARY **519** p. 51.

Lampsilis, HENDERSON **331** p. 83.—*L.*, ORTMANN **503** p. 142.

Lanceolaria, PRASHAD in ANNANDALE & PRASHAD **22.**—*L.*, HAAS 296 p. 189.

Lepton squamosum & *L. clarkiae*, WINCKWORTH **712** & *L. s.*, **711.**

Leptospatha, PALLARY **519** p. 55.

Lucina, IREDALE **352** p. 206.

†*Lucina invalida* **nom. n.** for *L. cretacea*, Whitfield, HANNA Proc. Cal. Acad. Sci. **13** p. 170.—*L. procumbens* **sp. n.** Jura. Poland, LEWINSKI Mém. soc. géol. Paris **24** p. 78.

†*Lucinida*, MARWICK **439** p. 193.

Margaritana redomica **sp. n.** Morocco, PALLARY Bul. soc. sci, nat. Maroc **3** p. 78.—*M. margaritifera*, SCHLESCH. **611**.—*M.*, HAAS **298** p. 78.—*M.*, HENDERSON **331** p. 88.

Margaritanopsis, HAAS **296** p. 193.

Margaritifera, SCHLESCH **612**.

Medionidus, ORTMANN **503** p. 99.

Melliteryx **gen. n.** for *Eycina acupuncta* Hed., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

Mendicula memorata **gen.** & **nom. n.** for *Lucina induta* Hed., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

Microcondylaea, HAAS **298** p. 76.

Microdontia, HAAS **296** p. 196.

Micromya, ORTMANN **503** pp. 101–105, 137–142.

†*Miltha* ? *martini* **sp. n.** Pliocene India, COSSMANN J. conchyliol. **68** p. 122.—*M.*, COSSMANN **155** p. 140.

Montacuta bidentata & ? *M. perrieri* WINCKWORTH **712**.

Musculium, HENDERSON **331** p. 92.

Mutelina, PALLARY **519** p. 52.

†*Mycetopus mengyinensis* **sp. n.** Cretaceous China, GRABAU Bul. Geol. Surv. China **5** p. 153.

Mylitta polita **sp. n.** King Isd., Tasmania, MAY Paprs. Proc. R. Soc. Tasmania **1923** p. 48.

†*Myllita finlayi* **sp. n.** Pliocene N. Zealand, MARWICK Trans. Proc. N. Zeal. Inst. **55** p. 194.

Myrtaea, IREDALE **352** p. 206.

Nephronaias elvae **sp. n.** Nicaragua, WALKER Nautilus **38** p. 51.

Nodularia, HAAS **296** p. 190.

Notomyrtea **gen. n.** for *Myrtaea botanica* Hed., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

Numella **gen. n.** for *Diplodonta adamsi* Ang., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 192.

†*Opis*, COSSMANN **157** pp. 43–44.

†*Opisoma caudatum* **sp. n.** Jura. France, COSSMANN Mém. Soc. Geol. Min. Bretagne **1** p. 44.

Oxynaia, HAAS **296** p. 195.

†*Palaeocardita* with *P. baruca* [**var. n.**] *misolensis* Trias Timor, KRUMBECK Pal. Timor **13** pp. 248 [390]–249 [391].

†*Paracyclas fletcheri* **sp. n.** Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** p. 139.—*P.*, BRANSON **89** pp. 115–116, 155.

†*Phacoides micropteryx*, *P.* (*Parvilucina*) *bonneti*, **spp. n.**, Pliocene India, COSSMANN J. conchyliol. **68** pp. 124–125.

Pisidium with *P. titicacense* **sp. n.** Lake Titicaca, PILSBRY Proc. Acad. Nat. Sci. Philad. **76** pp. 53–54.—*P. torquatum* Stelfox is a syn. of *P. moitessierianum* Palad., KENNARD & WOODWARD Proc. Malac. Soc. **16** p. 14.—*P. conventus*, ODHNER **489**.—*P.*, HANNA **310** p. 136.—*P.*, HENDERSON **331** p. 93.—*P.*, PALLARY **519** p. 40.

†*Pisidium*, BOGATCHEV **71** pp. 179–183.

Phymesoda = *Cyclas* Lk. 1818 *non* 1789 and *Corneocyclas* Fér 1818 *non* Dall 1903, KENNARD & WOODWARD Proc. Malac. Soc. **16** pp. 132–134.

Physunio, HAAS **296** p. 200.

†*Pleurophorus timoricus* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** p. 228 [370].

Pressidens, HAAS **296** p. 198.

Prohyriopsis, HAAS **296** p. 163.

†*Pseudisocardia*, COSSMANN **157** p. 49.

Pseudodon, HAAS **296** p. 129.

Pseudometula, PALLARY **519** p. 52.

†*Pseudotrapezium*, COSSMANN **157** p. 48.

†*Pteromeris houdasi* **sp. n.** Eocene France, COSSMANN Bul. soc. sci. nat. Nantes **1** p. 134.

Ptychorhynchus, HAAS **296** p. 153.

Rhombunio, HAAS **298** p. 68.

Rhombuniopsis, HAAS **296** p. 185.—*R.*, PRASHAD **559** p. 424.

Rochefortia, IREDALE **352** p. 207.

Rochefortina **subgen. n.** type *Rochefortia* (*R.*) *semele* **sp. n.** Hawaiian Isds., DALL Bul. Biol. Soc. Washington **37** p. 88.

Salaputium **gen. n.** for *Crassatella fulvida* Ang., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

†*Schafhäutlia*, Cox **162** p. 83.

Schizodesma, Prashad in Annandale & Prashad **22**.

Simpsonella, Haas **296** p. 198.

†*Spaniorinus*, Cossmann **155** pp. 139–140.

Spatha, Pallary **519** p. 54.

Sphaerium corneum, Thiel **655**.—*S.*, Henderson **331** p. 90.—*S.*, Pallary **519** p. 39.—*S.*, Prashad **559** p. 428.

†*Sphaerium* with *S. aequilonarium*, *gemma*, **spp. n.**, Tertiary Arctic Canada, Dall in O'Neill Rep. Canad. Arct. Exp. 1913–18 **11** p. 28A. — *S.*, Bogatchev **71** p. 179.

Strophitus, Henderson **331** p. 84.

Talabrica **gen. n.** for *Crassatella aurora* Ad. & Ang., Iredale Proc. Linn. Soc. N.S.W. **49** pp. 181, 264.

†*Trapezium*, Cox **162** p. 78.

Trapezoideus, Haas **296** p. 198.

Unio tifleticus **sp. n.** Morocco, Pallary Bul. soc. sci. nat. Maroc. **3** p. 78.—*U. orbiculatus* Hild. & *U. abruptus* Say, Frierson **247**.—*U. ater* & *limosus*, Woodward **716**. — *U. batava*, Kennard & Woodward **378** pp. 134–136.—*U. crassus*, Stengel **637** —*U.*, Haas **298** p. 71.—*U.*, Domet de Vorges **208**.—*U.*, Pallary **519** p. 40.—*U.*, Modell **460**.

†*Unio* with *U. Baltavarensis*, *neszmelyensis*, **spp. n.**, Halavats Magyar Kir. Földt. Évk. Budapest **24** pp. 397–400. — *U. cantianus* **sp. n.** Pleistocene England, Kennard & Woodward Proc. Malac. Soc. **16** pp. 136–137.—*U.* with *U. chaoi* **sp. n.** Cretaceous C. China, Grabau Bul. Geol. Surv. China **5** pp. 210–215.—*U.* with *U. chasaricus*, *kalmykorum*, *maslakowetzianus*, *rumanus* Font. (Tourn) var. *emigrans*, *sinzowi*, *pseudomoldavicus*, *Kutschum*, *jermak*, *transrhyphaeus*, *kenissara*, *kirghisicus*, **spp. & var. n.**, Russia in Europe and Asia, Bogatchev Mem. Com. Geol. Petrograd **135** pp. 133–141, 143–178.—*U.*, Dall in O'Neill **184** p. 28A.

[Unionidae], Grier **289**.

Uniomeris, Henderson **331** p. 88.

Venericardia, Iredale **352** p. 205.

†*Venericardia awamoaensis* Harris 1879 (emend.) should replace *V. pseutes* Sut. 1917, Finlay Proc. Malac. Soc. **16** p. 106.—*V.* (*Pleuromeris*) *marshalli*, *V. miodontiscus minima*, **spp. n.**, Pliocene N. Zealand, Marwick Trans. Proc. N. Zeal. Inst. **55** pp. 192–193.—*V. phyletica*, *martini*, *solitaria*, *bonneti*, *oligopleura*, **spp. n.**, Pliocene India, Cossmann J. conchyliol. **68** pp. 109–114.—†*V. tokunagai*, *pacifera*, *laxata*, **spp. n.**, Tertiary Japan, Yokoyama J. Coll. Sci. Tōkyō **45** Art. 3 pp. 18–19.—*V.*, Cossmann **155** pp. 132–134.

Virgus, Haas **296** p. 193.

Tellinacea.

Abra, Iredale **352** p. 212.

Abranda **gen. n.** for *A. rex* **nom. n.** for *Tellina elliptica* Sow., Iredale Proc. Linn. Soc. N.S.W. **49** p. 182.

†*Arcopagia*, Cossmann **156** p. 140

†*Barytellina* **gen. n.** with *B. crassidens* **sp. n.** Pliocene N. Zealand, Marwick Proc. Malac. Soc. **16** pp. 25–26.—*B. anomalodonta* **sp. n.** Tertiary N. Zealand, Finlay Trans. Proc. N. Zeal. Inst. **55** p. 473.

Camingia, Heilbrunn **329**.

Donax, Strong **645**.

Gari, Iredale **352** p. 212.

†*Linearia kansasensis* **sp. n.** Cretaceous Kansas, Twenhofel Bul. State Geol. Surv. Kansas **9** p. 74.

†*Macoma baltica* var. *astartoides* **var. n.** Quaternary Sweden, Hägg Geol. För. Förh. **45** p. 438.—*M. erycinoides* **sp. n.** Pliocene India, Cossmann J. conchyliol. **68** p. 142.—*M. robini* **sp. n.** Tertiary N. Zealand, Finlay Trans. Proc. N. Zeal. Inst. **55** p. 474. —*M.*, Dall in O'Neill **184** p. 28A.—*M.*, Makiyama **429** p. 25.

Mactra leda **nom. mut.** for *M. attenuata* Hutt. 1873, Finlay Proc. Malac. Soc. **16** p. 106.—*M.*, Tomlin 660.

†*Mactra chrydaea* Suter should replace *M. dubia* (Hutt.) 1873, FINLAY Proc. Malac. Soc. **16** p. 106.—*M.* ? *epidema* **sp. n.** Tertiary Arctic Canada, DALL in O'NEILL Rep. Canad. Arct. Exp. 1913–18 **11** p. 28A.—*M.* with *M. siouxensis* **var. n.** *smolanensis* Cretaceous Kansas, TWENHOFEL Bul. State Geol. Surv. Kansas **9** p. 75.—*M.*, MAKIYAMA **429** p. 26.

Schizodesma spengleri, GILCHRIST **269.**

Scissulina **subgen. n.** Type *Tellina dispar* Conrad. 1837, DALL Bul. Biol. Soc. Washington **37** p. 88.

Semelangulus **gen. n.** for *Tellina tenuilirata* Sow., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

†*Spisula falcata brioniana* **var. n.** Tertiary California, TRASK Univ. Cal. Publ. Geol. **13** p. 152.

Syndosmya alba, ORTON **506.**—*S. tenuis*, BUTTERFIELD **101.**

Tellina with *T. beryllina* **nom. n.** for *T. inaequivalvis* Sow., IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 182, 211–212.

†*Tellina* with *T. alisoensis santana*, **spp. n.**, Cretaceous California, PACKARD Univ. Cal. Publ. Geol. **13** p. 226.—*T.* (*Moerella*) *bonneti* **sp. n.** Pliocene India, COSSMANN J. conchyliol. **68** p. 140.—*T. insurana* **nom. n.** for *T. tenuistriata* Davis, HANNA Proc. Cal. Acad. Sci. **13** p. 183.—*T. sejugata*, *besshoensis*, **spp. n.**, Tertiary Japan, YAKOYAMA J. Coll. Sci. Tōkyō **45** Art. 3 p. 14.

VENERACEA.

Antigona, IREDALE **352** p. 210.

†*Antigona willisi* **sp. n.** Tertiary California, TRASK Univ. Cal. Publ. Geol. **13** p. 152.—*A.*, COX 163 p. 61.

Bassina, IREDALE **352** p. 211.

†*Callista*, COSSMANN **156** p. 134.—*C.*, YEHARA **726** p. 38.

Chione (?) *elegans*, FINLAY **230.**

†*Chione crassitesta* **sp. n.** Tertiary N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** p. 478.—*C.* with *C.* (*Clausinella*) *karikalensis* **sp. n.** Pliocene India, COSSMANN J. conchyliol. **68** pp. 135–137.

Chioneryx **gen. n.** for *Venus striatissima* Sow., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

†*Circe* (*Circenita*) *tivelinoides* **sp. n.** Pliocene India, COSSMANN J. conchyliol. **68** p. 130.

†*Clementia speciosa* **sp. n.** Tertiary Japan, YOKOYAMA J. Coll. Sci. Tōkyō **45** Art. 2. p. 15.—*C.*, COX **163** p. 62.

†*Cryptogramma semiradiatum* **sp. n.** Pliocene India, COSSMANN J. conchyliol. **68** p. 153.

Cyclina, PRASHAD in ANNANDALE & PRASHAD **22**

†*Cyprimeria nepotina* **sp. n.** Pliocene India, COSSMANN J. conchyliol. **68** p. 138.

†*Cyrenoida*, DALL **185.**

Cytherea sulcata, FINLAY **230.**

Dosinia, IREDALE **352** p. 208.

Eumarcia **gen. n.** for *Venus fumigata* Sow., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

Flugtiger **gen. n.** *F. royanus* **sp. n.** S. E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 209.

Gafrarium, IREDALE **352** p. 209.

†*Goniophora* with *G. laticostata*, *mantsi*, **spp. n.**, Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** pp. 128–132.

†*Gouldia*, COSSMANN **157** p. 46.

Gouldiopa **gen. n.** *Gouldia australis* Ang., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

†*Leptesthes chingshanense* **sp. n.** Cretaceous China, GRABAU Bul. Geol. Surv. China **5** p. 107.

Lioconcha, IREDALE **352** p. 209.

Macrocallista, IREDALE **352** p. 210.

Marcia, IREDALE **352** p. 210.

†*Meretrix* with *M. angulata*, *nitida* var. *major* **sp. & var. n.** Cretaceous California, PACKARD Univ. Cal. Publ. Geol. **13** pp. 425–426.—*M. fabulina* Stol *madagascariensis* **mut. n.** Cretaceous Madagascar, COTTREAU Ann. paléont. Paris **11** p. 157.

†*Miocardia*, COSSMANN **156** p. 129.

Notocallista **gen. n.** for *Cytherea kingii* Gray, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

†*Orthonota* ? *marylandica* **sp. n.** Silurian U.S.A., SWARTZ & PROUTY Maryld. Geol. Surv. Silur. Mem. **1923** p. 481.—*O.* with *O. proundulata, arisaigensis, pressiornata,* **spp. n.**, Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** pp. 134–138.

†*Paphia*, MAKIYAMA **429** p. 25.

Petricola, CIRIA **125.**

Pitaria, IREDALE **352** p. 210.

†*Pitaria* ? *praenominata* **nom. n.** for *Meretrix dalli* Dick., HANNA Proc. Cal. Acad. Sci. **13** p. 177.—*P. tenuistriata*, WRIGLEY **719.**

Sunetta, IREDALE **352** p. 208.

†*Sunetta dautzenbergi* **sp. n.** Pliocene India, COSSMANN J. conchyliol. **68** p. 132.

Tellimya ferruginosa, WINCKWORTH **712.**

†*Tivela merriami* **sp. n.** Tertiary California, TRASK Univ. Cal. Publ. Geol. **13** p. 151.

Venus, HOPKINS **346.**

†*Venus brioniana* **sp. n.** Tertiary California, TRASK Univ. Cal. Publ. Geol. **13** p. 151.—*V. furtiva, terrena* **spp. n.** Tertiary Japan, YOKOYAMA J. Coll. Sci. Tōkyō **45** Art. 3 p. 15.—*V.*? *ensiferus* Dall, HANNA **309** p. 185.

CARDIACEA.

Adacna, BORCEA **76** p. 230.

†*Adacna praelaeiviuscula, subvitrea, incipiens,* **spp. n.**, Pleistocene, ANDRUSSOV Mém. Com. Géol. Petrograd **110** pp. 113–115.

†*Apscheronia valarovici, sorokini, eurydesma, calvescens,* **spp. n.**, Pleistocene, ANDRUSSOV Mém. Com. Géol. Petrograd **110** pp. 66, 68, 72–73.

Cardium tuberculatum, L. **var n.** *pharisiana* Tunis, PALLARY Bul. Soc. hist. nat. Alger **15** p. 324.—*C. edule*, RÖZSENYI **593.**—*C. fasciatum*, ORTON **506.**—*C.*, IREDALE **352** p. 207.

†*Cordium* with *C. coronaensis* **sp. n.** Cretaceous California, PACKARD Univ. Cal. Publ. Geol. **13** pp. 424–425.—*C.* with *C. gorgasi* **nom. n.** for *C.* (*Laevicardium*) *dalli* Toula, HANNA Proc. Cal. Acad. Sci. **13** pp. 160–161.—*C.* (*Laevicardium*) *jobanicum, squalidum, tristiculum,* **spp. n.**, Tertiary Japan, YOKOYAMA J. Coll. Sci. Tōkyō **45** Art. 3 pp. 15–16.—*C. productum* Sow. *subtriangulare* **mut. n.** Cretaceous Madagascar, COTTREAU Ann. paléont. Paris **11** p. 153.—*C. trapezinum* **sp. n.** Pleistocene, ANDROSSOV Mém. Com. Géol. Petrograd **110** p. 107.—*C. yokoyamai, C.* (*Loxocardium*) *karikalense,* **spp. n.** Pliocene India, COSSMANN J. conchyliol. **68** pp. 126–128.—*C. zaccagnai* **sp. n.** Cretaceous Tripoli, VINASSA DE REGNY Mem. Descr. Cart. Geol. Ital. **18** p. 111. *C.*, COX **161** p. 177.—*C.*, HÄGG **302** p. 16.

†*Cymbophora intoxicata* **nom. n.** for *Cardium* (*Protocardia*) *linteum* Con., HANNA Proc. Cal. Acad. Sci. **13** p. 164.

†*Didacna subintermedia, paucintermedia, turkmena, longintermedia, plurintermedia, multintermedia, hyrcana, loerentheyi,* **spp. n.**, Pleistocene. ANDRUSSOV Mém. Com. Géol. Petrograd **110** pp. 61–65.

Hippopus, HEDLEY **322.**

Monodacna, BORCEA **76** p. 226.

†*Monodacna transkaspica, sublaevigata, beibatica, sjoegreni* VARR. *pyrophila, minor, M. kabristanica, nitida, goesdekiana, caucasica, didacnoides, dubia, golubiatnikovi, carinifera,* **spp. & varr. n.** Pleistocene, ANDRUSSOV Mém. Com. Géol. Petrograd **110** pp. 82–106.

†*Papyridia* (*Fulvia*) *nipponica* **sp. n.** Tertiary Japan, YOKOYAMA J. Coll. Sci. Tōkyō **45** Art. 3 p. 17.

Pratulum **gen. n.** for *Cardium thetidis* Hed., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 182.

†*Protocardia boonei* **sp. n.** Jura. France, COSSMANN Mém. Soc. Géol. Min. Bretagne **1** p. 47.—*P.* (?*Isocyprina*) *timorensis* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** p. 258 [400].

†*Unicardium*, COSSMANN **157** p. 47.

CHAMACEA.

†*Antillocaprina* **gen. n.** Type *Caprinella occidentalis*, Whitf., TRECHMANN Geol. Mag. **61** p. 407.

†*Biradiolites* with *B. coryi, semiannulosus, rudissimus, minhoensis, subcancellatus, jamaicensis, mooretownensis,* **spp. n.**, Cretaceous Jamaica, TRECHMANN Geol. Mag. **61** pp. 400–404.

†*Bournonia barretti* **sp. n.** Cretaceous Jamaica, TRECHMANN Geol. Mag. **61** p. 405.

†*Chama grunskyi* **nom. n.** for *C. pacifica* Dick., HANNA Proc. Cal. Acad. Sci. **13** p. 162.

†*Coralliochama radiolitiformis* **sp. n.** Cretaceous Jamaica, TRECHMANN Geol. Mag. **61** p. 406.

†*Hippurites radiosus*, ANTHONY **25.**—*H.*, TRECHMANN **672** p. 396.

†*Lapeirousia*, TRECHMANN **672** p. 405.

†*Plagioptychus*, TRECHMANN **672** p. 407.

†*Praebarrettia* **gen. n.** Type *Barrettia sparcilirata* Whitf., TRECHMANN Geol. Mag. **61** pp. 394, 395.

†*Radiolites*, HÄGG **302** p. 17.

†*Titanosarcolites* **gen. n.** Type *Caprinula gigantea*, Whitf., TRECHMANN Geol. Mag. **61** pp. 394, 397.

MYACEA.

†*Corbula binominata* **nom. n.** for *C. tenuis* Moody; *C. complicata* **nom. n.** for *C. dilatata* Waring, HANNA Proc. Cal. Acad. Sci. **13** p. 163.—*C. braunsi* **sp. n.** Jura. Poland, LEWINSKI Mém. soc. géol. Paris **24** p. 85.—*C.* with *C. pachymorpha, bonneti, laterugata,* **spp. n.**, Pliocene India, COSSMANN J. conchyliol. **68** pp. 144–149.—*C. peregrina, tanabensis, tsukaharai, succincta,* **spp. n.**, Tertiary Japan, YOKOYAMA Japan. J. Geol. Geogr. **2** pp. 55–56.—*C. pseudomucronata* **sp. n.** Tanganyika Territory HENNIG Mon. Geol. Pal. Berlin **2** p. 103.—*C.*, WRIGLEY **719.**

Ensis siliqua, LIOUVILLE **420.**

Glycymeris with *G. striatularis suspectus* **subsp. n.** S. E. Australia, IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 187–190.—*G.*, LIOUVILLE **420.**

†*Glycimeris larvata* **nom. n.** for *G. conradi* Dall, HANNA Proc. Cal. Acad. Sci. **13** p. 167.

Lutraria, TOMLIN **660.**

Mya arenaria, RÖZSENYI **593.**—*M. a.*, HECHT **317, 318, 319, 320** & **321.**

†*Mya inopia* **nom. n.** for *Eryptomya ovalis* Con., HANNA Proc. Cal. Acad. Sci. **13** p. 172.

†*Myadesma* **gen. n.** with *M. dalli howei*, Oligocene N. America; *M. pacifica* Miocene N. America; **spp. n.**, CLARK, B. L. Univ. Cal. Pub. Geol. **14** pp. 115–118.

Myadesmidae **fam. n.**, CLARK, B. L. **132** p. 115.

†*Palaeosolen antigonishensis, amii,* **spp. n.**, Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** pp. 139–140.

†*Panopaea* [*Vide etiam Panope* & *Panopea*] with *P. koeneni* **sp. n.** Tertiary Germany, STEUER Abh. geol. Landesanst. Darmstadt **6** pp. 56–59.—*P. sukovensis* **sp. n.** Aptian Serbia, PETKOVIÓ Ann. Geol. Balkan Belgrade **7** p. 76.

†*Panope* [*Vide etiam Panopaea* & *Panopea*] *californica* **sp. n.** Cretaceous California, PACKARD Univ. Cal. Publ. geol. **13** p. 427.

†*Panopea* [*Vide etiam Panopaea* & *Panope*] *intermedia*, WRIGLEY **719.**

†*Periploma binominata* **nom. n.** for *P. undulata* Clark, HANNA Proc. Cal. Acad. Sci. **13** p. 177.

†*Psammobia noetlingi* **sp. n.** Pliocene India, COSSMANN J. conchyliol. **68** p. 139.

Saxicava, IREDALE **382** p. 214.—*S.*, LAMY **397** pp. 218–248.

†*Siliqua mentorensis* **sp. n.** Cretaceous Kansas, TWENHOFEL Bul. State Geol. Surv. Kansas **9** p. 83.

Sinonovacula **gen. n.** *Tagelus* (*pars*) PRASHAD in ANNANDALE & PRASHAD Proc. Malac. Soc. **16** pp. 45–49.

†*Solecurtus bensoni, evolutus, chattonensis,* **spp. n.**, Tertiary N. Zealand, FINLAY Trans. Proc. N. Zeal. Inst. **55** pp. 471–472.

Solen with *S. correctus* **nom. n.** for *S. sloanei* auct., IREDALE Proc. Linn. Soc. N.S.W. **49** pp. 182, 213, 218.

†*Solen* (*Siliqua*) *alisoensis* **sp. n.** Cretaceous California, PACKARD Univ. Cal. Publ. Geol. **13** p. 427.—*S.*, MAKIYAMA **429** p. 25.

†*Solenocurtus*, COSSMANN **156** p. 143.

ADESMACEA.

Bankia (*B.*) *chiloensis* **sp. n.** Chile, BARTSCH Rev. chilena **27** p. 147.

Martesia striata, MILLER, R. C. **458** p. 146.

Nausitoria, IREDALE **382** p. 214.

Pholadidea, HAYNES **315** p. 120.

†*Pholadomya* ? *belviderensis* **sp. n.** Cretaceous Kansas, TWENHOFEL Bul. State Geol. Surv. Kansas **9** p. 79.

Teredo with *T.* (*T.*) *batilliformis*, *T.* (*Zopoteredo*) *somersi*, **spp. n.**, Bermuda, CLAPP, W. F. Proc. Amer. Acad. Arts Sci. Boston No. 12 **59** pp. 281–286.—*T.* with *T. furcillatus*, *trulliformis* Hawaiian Isds. ; *T. samoanensis* Samoa, **spp. n.**, MILLER, R. C. Univ. Cal. Pub. Zool. **26** pp. 146-150.—*T.*, MILLER, R. C. **457.**

ANATINACEA.

†*Anatina* (*Cercomya*) *callovica* **sp. n.** Jura. France, COSSMANN Mém. Soc. Geol. Min. Bretagne **1** p. 50.

†*Clavagella lybica* **sp. n.** Cretaceous Tripoli, PARONA Mem. Serv. Descr. Cart. Geol. Ital. **8** p. 51.

†*Clidophorus* with *C. nitidus*, *subobblongatus*, **spp. n.**, Silurian U.S.A., SWARTZ & PROUTY Maryld. Geol. Surv. Silur. **1923** pp. 471–473.

†*Cuneomya* with *C. crassiornata*, *marklandensis*, **spp. n.**, Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** pp. 96–97.—*C. ulrichi* **sp. n.** Silurian U.S.A., SWARTZ & PROUTY Maryld. Geol. Surv. Silur. **1923** p. 467.

†*Edmondia tschnyschewiana* **sp. n.** Upper Palaeozoic Russia, FRÉDÉRIX Mém. Com. Géol. Petrograd **109** p. 38.—*E.*, DEMANET **200** p. 220.

Eximiothracia **gen. n.** for *Thracia speciosa* Ang., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 181.

†*Goniomya*, COSSMANN **157** p. 51.

Myadora complexa, *royana*, **spp. n.**, N.S. Wales, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 201.

†*Neaera mazzocchii* **sp. n.** Cretaceous Tripoli, PARONA Mem. Serv. Descr. Cart. Geol. Ital. **8** p. 51.

†*Pholadomya* with *P.* (*Homomya*) *gibbosa* J. Sow. **var. n.** *asiatica* Jura. Palestine, Cox Ann. Mag. Nat. Hist. **13** pp. 177–180.—*P.* with *P. nonaimensis* **sp. n.** Cretaceous British Columbia, REAGAN Pan-Amer. Geol. **41** pp. 184–185.—*P.* with *P. semicaudata*, *P.* (*Procardia*) *cheyensis* **spp. n.**, Jura. France, COSSMANN Mém. Soc. Géol. Min. Bretagne **1** pp. 52–53.—*P.*, STEUER **639** p. 59.

Phragmorisma, IREDALE **352** p. 201.

†*Pleuromya* with *P. denivellata* **sp. n.** Jura. France, COSSMANN Mém. Soc.Geol. Min. Bretagne **1** p. 51.—*P. tellina* de Lor. **var. n.** *agassizi* Jura. Poland, LEWINSKI Mém. soc. géol. Paris **24** p. 82.

†*Sanguinolites*, DEMANET **200** p. 215.

†*Thracia suciensis* **sp. n.** Cretaceous Puget Sd., REAGAN Pan-Amer. Geol. **41** p. 183.

Thracidora **gen. n.** for *Thraciopsis arenosa* Hedley, IREDALE Proc. Linn. Soc. N.S.W. **49** p. 181.

Thraciopsis peroniana **nom. n.** for *T. elegantula* auct., IREDALE Proc. Linn. Soc. N.S.W. **49** p. 181.

SEPTIBRANCHIA.

POROMYACEA.

Cuspidaria (*Cardiomya*) *oldroydi* Dall. **sp. n.** Puget Sound, OLDROYD, I. S. Publ. Puget Sd. Biol. St. **4** p. 33.

INCERTAE SEDIS.

†*Ceratomya granifera* **nov. mut.** *C. cf goniophora* Cossm., COSSMANN Mém Soc. Geol. Min. Bretagne **1** p. 50.

†*Cornucardia timorensis* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** p. 252 [394].

†*Cosmogoniophora* with *C. bellula* **var. n.** *elongata* Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** pp. 132–133.

†*Divitaria*, COSSMANN **155** p. 135.

†*Eocrassina*, COSSMANN **155** p. 136.

†*Goossensia*, COSSMANN **155** p. 135.

†*Honeymania elongata* **sp. n.** Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** pp. 111–113.

†*Isoprina boonei*, *I.* ? *alticordata*, **spp. n.**, Jura. France, COSSMANN Mém. Soc. Geol. Min. Bretagne **1** p. 48.

†*Lahillia*, WILCKENS **708** pp. 539–541.

†*Laubrieria*, COSSMANN **155** p. 137.

†*Mytilomorpha*, DEMANET **200** p. 214.

†*Namnetia*, COSSMAN **155** p. 140.

†*Pachyptus callovicus* **sp. n.** Jura. France, COSSMANN Mém. Soc. Geol. Min. Bretagne **1** p. 46.

†*Palaeocardia* ? *woodmani* **sp. n.** Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** p. 123.

Philobrya subpurpurea **sp. n.** King Isd. Tasmania, MAY Paprs. Proc. R. Soc. Tasmania **1923** p. 48.

†*Protopis timorensis* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** pp. 261 [803].

†*Rhaetidia timorensis* **sp. n.** Trias Timor, KRUMBECK Pal. Timor **13** p. 259 [401].

Cephalopoda.

GENERAL.

Cephalopoda, PALLARY **516** p. 17.

CEPHALOPODA.

Abralia gilchristi **sp. n.** S. Africa, ROBSON Union S. Af. Fish. Mar. Biol. Surv. Special Repts. **9** p. 3.—*A.*, ROBSON **583** p. 601.

†*Acanthoceras amudariense* **sp. n.** Upper Cretaceous Turkestan, ARKHANGUELSKI Mem. Com. Geol. Petrograd **152** p. 48.—*A.* with *A. shastense* **sp. n.** Cretaceous California, REAGAN Pan-Amer. Geol. **41** pp. 179–180.—*A. turneri* (White), HANNA **309** p. 156.

†*Acanthodiscus lamplughi* **sp. n.** Cretaceous, SPATH Geol. Mag. **61** p. 76.

†*Acantholytoceras* **gen. n.** type *Hamites* (*Pictetia*) *longispinus*, SPATH Mon. Palaeont. Soc. London **1** 1923 p. 21.

Acanthosepion, ROBSON **583** p. 639.

†Aconeceratidae **fam. n.** SPATH Mon. Palaeont. Soc. London **1** 1923 p. 35.

†*Acroteuthis*, CHRISTENSEN **124.**

†*Actinocamax quadratus*, HALLEZ **305.**—*A.*, HÄGG **302** p. 17.

†*Actinoceras* with *A.* (*Armenoceras*) *gouldense* **sp. n.** Silurian Michigan, FOERSTE Contrib. Geol. Mus. Univ. Mich. **2** pp. 31–38.

†*Ægocrioceras subseeleyi*, *koeneni*, **spp. n.**, Cretaceous, SPATH Geol. Mag. **61** pp. 76 77.

†*Aegoceras*, KILIAN & BLANCHET **379.**

†*Aegolytoceras* **gen. n.**, SPATH Mem. Geol. Surv. Ind. **9** p. 4.

†Agassiceratidae **fam. n.**, SPATH Proc. Geol. Ass. **35** pp. 189, 207.

†*Agoniatites*, FERRONNIÈRE **229** pp. 31–34.

†Alsatitidae **fam. n.** SPATH Proc. Geol. Ass. **35** pp. 189, 200.

†*Amaltheus ebrayi* de Loriol, SPATH **623** p. 508.—*A.*, KILIAN & BLANCHET **379.**

†*Ammonites*, NEWTON **479** p. 143.

†*Ancyloceras*, LEUTHARDT **406.**

Anomalocranchia **gen. n.** *A. impennis* **sp. n.** S. Africa, ROBSON. Union S. Af. Fish. Mar. Biol. Surv. Special Repts. **9** pp. 8–9.—*A.*, ROBSON **583** p. 628.

†*Anthracoceras*, BISAT **60** p. 100.

†*Arcestes*, ARABU **26.**—*A.*, GEMMELLARO **264** p. 139.

†*Arcticoceras* **gen. n.** Macrocephalitidae genotype = *A. ishmae* Kegs. sp., SPATH Mem. Geol. Surv. Ind. **9** p. 7.

†*Argentiniceras* **gen. n.** SPATH Geol. Mag. **61** p. 89.

†*Arieticeras*, PALVARINO **521** pp. 67, 68.

†Arietidae, SPATH **628.**

†*Armenoceras* **gen. n.** Genotype *Actinoceras hearsti* Parks FOERSTE Contrib. Geol. Mus. Univ. Mich. **2** p. 27.—*A.* with *A. juncticosta* **sp. n.** Lias England, TRUEMAN Proc. Cotteswold Nat. F. Cl. **21** pp. 172–173.—*A. pseudokridion* **sp. n.** Lias, SPATH Proc. Geol. Ass. **35** p. 187.

†Arnioceratidae **fam. n.**, SPATH Proc. Geol. Ass. **35** pp. 189, 205.

†*Arnioceratoides spurius* **nom. n.** & *A. hercynicum* **nom. n.** for *A. falcaries* (Quens.) Schm., SPATH Proc. Geol. Ass. **35** p. 204.

†*Asaphoceras* **gen. n.**, SPATH Proc. Geol. Ass. **35** p. 192.

†*Aspidoceras*, NEAVERSON **476.**

†Aspidoceratidae, SPATH **625** p. 18.

†*Aturia*, IHERING, VON **350.**

†*Aulacosphinctoides* **gen. n.** Ataxioceratidae genotype *A. infundibulus* Uhlig, SPATH Mem. Geol. Surv. Ind. **9** p. 16.

†Aulacostephanidae **fam. n.**, SPATH Mem. Geol. Surv. Ind **9** p. 13.

†*Bæculites*, CRICK **172.**

†*Barremites subcassida* **sp. n.** Cretaceous, SPATH Geol. Mag. **61** p. 76.

Bathypolypus grimpei **sp. n.** Natal Coast, 470 faths, ROBSON Ann. Mag. Nat. Hist. **13** p. 208.—*B.*, ROBSON **583** p. 669.

†*Belemnitella mucronata*, HALLEZ **305.** —*B.*, HÄGG **302** p. 18.

†*Belemnites* with *B.* (*Dactyloteuthis*) *hebetatus*, *attenuatus*, *B.* (*Odontobelus*) *janenschi*, *B.* (*Megateuthis*) *coniformis*, **spp. n.**, Lias Germany, ERNST Palaeont. Stuttgart **66** pp. 69–89.

†*Beneckeia*, COX **162** p. 88.

Benthoctopus with *B. berryi* **sp. n.** Off Cape Town, ROBSON Proc. Zool. Soc. **1924** pp. 658–668.

†*Beudanticeras* with *B. beudanti* var. *ibiciformis*, *B. subparandieri* **var.** & **sp. n.** Gault, SPATH Mon. Palaeont. Soc. London **1** 1923 pp. 49–63.—*B.*, NEAVERSON **476.**

†*Beyrichoceras* with *B. hodderense*, *delicatum*, **spp. n.**, Carbon. England, BISAT Proc. Yorks. Geol. Soc. **20** pp. 83–88.

†*Beyrichoceratoides* **gen. n.** with *B. invaginatum*, *castletonensis*, **spp. n.**, Carbon. England, BISAT Proc. Yorks. Geol. Soc. **20** pp. 88–93.

†*Blanfordiceras* **nom. n.** for *Blanfordia* SPATH Mem. Geol. Surv. Ind. **9** p.16.

Bolitaenidae, GRIMPE **291.**

†*Borissiakoceras* **gen. n.** *B. mirabile* **sp. n.** Upper Cretaceous Turkestan, ARKHANGUELSKI Mém. Com. Geol. Petrograd **152** p. 55.

†*Boucaulticeras* **gen. n.** SPATH Proc. Geol. Ass. **35** p. 194.

†*Cadoceras*, BUCKMAN in O'NEILL **97.**

†*Calliptychoceras* **gen. n.**, SPATH Geol. Mag. **61** p. 88.

†*Callizoniceras* **gen. n.** Desmoceratidae, SPATH Mon. Pal. Soc. **85** p. 35.

†*Caloceras* with *C. giganteum*, *wrighti*, **spp. n.**, Lias, SPATH Proc. Geol. Ass. **35** p. 191.

Cardioceras reclinatoalternans **sp. n.** Jura. C. Russia, NIKITIN Mém. Com. Géol. Petrograd **70** pp. 11, 41.—*C.*, NEAVERSON **476.**—*C.*, ROSANOF **590.**

†*Carstenia*, COLLET **146.**

†*Ceratites*, WAGNER **690.**

†*Charmasseiceras* **gen. n.**, SPATH Proc. Geol. Ass. **35** p. 194.—*C. strassenense* **nom. n.** for *C. posttaurinum* Waehner & *C. hercynicum* **nom. n.** for *Schlotheimia d'orbignyana* Sch., SPATH Proc. Geol. Ass. **35** p. 199.

†*Cheirobelus* **gen. n.** genotype *Belemnites lindsayi* Hector, WHITEHOUSE Geol. Mag. **61** p. 414.

Cheiroteuthis, ROBSON **582.**

†Cheloniceratidae **fam. n.**, SPATH Mon. Palaeont. Soc. London **1** 1923 p. 35.

†*Christolia*, JEANNET **363** p. 363.

Cirrhoteuthis gilchristi **sp. n.** S. W. Cape Town, 1,400 faths., ROBSON Ann. Mag. Nat. Hist. **13** p. 204.

Cirroteuthis (*Cirroteuthopsis*) *massyae* Grimpe, MASSY **441.**—*C.*, ROBSON **583** p. 676.

†*Cladiscites*, GEMMELLARO **264** p. 140.

†*Coeloceras* with *C. pettos amalthei* **form. n.** Lias Germany, BEURLEN Centralbl. Min. Stuttgart **1924** pp. 151–156.—*C.*, KILIAN & BLANCHET **379.**—*C.*, PALVARINO **521** pp. 64, 67.

†*Coelonautilus sargaensis* **sp. n.** Upper Palaeozoic Russia, FRÉDÉRIX Mém. Com. Géol. Petrograd **109** p. 40.

†*Collina*, PALVARINO **521** p. 65.

†*Colombiceras* **gen. n.** Douvilleiceratidae, SPATH Mon. Pal. Soc. **85** p. 64.

†*Cosmoceras* with *C. subfurcatum* **varr. n.** *serpens, acre* Jura. S. Russia, ZATWORNITZKY Bul. Com. Géol. Petrograd **33** pp. 544–548.—*C.*, BLANCHET **62.**

†*Cosmolytoceras* **gen. n.** SPATH Proc. Geol. Ass. **35** p. 189.

Cranchia, ROBSON **583** p. 624 & **584** p. 10.

†Craspeditidae **fam. n.** with *Subcraspedites* **gen. n.** genotype *A. plicomphalus* Sow.; *Garniericeras* **nom. n.** for *Garnieria*; *Kachpurites* **gen. n.** type "*Neumayria*" *fulgens* Trautschold, Nikitin, SPATH Mem. Geol. Surv. Ind. **9** p. 17.

†*Craspedodiscus*, SPATH **624** p. 77.

†*Cycloceras clintoni* **sp. n.** Silurian U.S.A., SWARTZ & PROUTY Maryld. Geol. Surv. Silur. Mem. **1923** p. 496.

†*Cymbites*, ERNST **223** p. 67.—*C.*, TRUEMAN **673.**

†*Cyrtoceras*, BRANSON **89** p. 124.—*C.*, FOERSTE **237** p. 85.

† *Cyrtorizoceras breviradiatum* **sp. n.** Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** p. 159.

†*Cytoclymenia* with *C. lateseptata* **sp. n.** Devon. Germany, SCHINDEWOLF Senckenbergiana **6** p. 106.

†*Dalmasiceras speighti* **sp. n.** Cretaceous N. Zealand, MARSHALL, P. Trans. Proc. N. Zeal. Inst. **55** p. 615.

†*Dawsonoceras* with *D. arisaigense* **sp. n.** Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** pp. 155–157.

†*Deroceras*, BEURLEN **56** p. 147.

†*Desmoceras*, SPATH **626** p. 39.

†*Dhosaites* **gen. n.** Pachyceratidae with *D. grayi* **nom. n.** for *Steph. nepalensis* Waagen non Gray, SPATH Mem. Geol. Surv. Ind. **9** p. 10.

†*Dichotomites typicus* **sp. n.** Cretaceous SPATH Geol. Mag. **61** p. 75.

†Dimitobelidae **fam. n.**, WHITEHOUSE Geol. Mag. **61** p. 410.

†*Dimitobelus* **gen. n.** genotype *Belemnites canhami* Tate, WHITEHOUSE Geol. Mag. **61** p. 412.

†*Dimorphoceras*, BISAT **60** p. 93.

†*Discosorus* with *D. ehlersi, halli*, **spp. n.**, Silurian Michigan, FOERSTE Contrib. Mus. Geol. Univ. Mich. **2** pp. 67–76.

†*Distoloceras pavlowi* **sp. n.** Cretaceous SPATH Geol. Mag. **61** p. 75.

Doratosepion confusa, CARLETON & ROBSON **107.**—*D.*, ROBSON **583** p. 647.

Doratopsis, ROBSON **582.**

†*Douvilliceras*, SPATH with *D. mammillatum* var. *baylei* and *D. albense*, **sp. & var. n.** Cretaceous, SPATH Mon. Pal. Soc. **85** pp. 68–72.

†*Dumortieria* with *D. flexicosta* **sp. n.** Lias Germany, ERNST Palaeont. Stuttgart **66** pp. 48–67.

†*Echioceras*, KILIAN & BLANCHET **379.**

†*Ellesmeroceras robsonensis* **sp. n.** Lower Ozarkian N. America, WALCOTT Smithsonian Misc. Collect. **67** p. 527.

Eledone moschata, ACKERMANN, HOLTZ & KUTSCHER **3.**—*E. m.*, CRAIFALEANU **165, 166** & **167.**—*E.*, CAMPS **104** p. 318.

Eledonella massyae **sp. n.** S. W. Cape Town, 1014 faths., ROBSON Ann. Mag. Nat. Hist. **13** p. 202.—*E.*, ROBSON **585** p. 671.

Eledonellidae, GRIMPE **291.**

†*Enagassiceras*, SPATH **628** p. 208.

†*Encycloceras* **gen. n.** Macrocephalitidae, SPATH Mem. Geol. Surv. Ind. **9** p. 8.

†*Endoceras* ? *monsensis* **sp. n.** Lower Ozarkian N. America, WALCOTT Smithsonian Misc. Collect. **67** p. 529.

†*Engonoceras* with *E. iris* **sp. n.** Upper Cretaceous England, SPATH Ann. Mag. Nat. Hist. **13** pp. 504–508.

†*Entrephoceras* with *E. sloani* **sp. n.** Eocene S. Carolina, REESIDE Proc. U. S. Nat. Mus. **65** pp. 1–4.

†*Eodesmoceras* **gen. n.** SPATH Mon. Palaeont. Soc. London **1** 1923 p. 33.

†*Epammonites scunthorpensis* **nom. n.** & *E. recticostatum* **sp. n.** Lias, SPATH Proc. Geol. Ass. **35** pp. 204, 205.

†*Eparietites* **gen. n.** genotype *Arietites tenellus* Simps., SPATH Proc. Geol. Ass. **35** p. 206.

†*Epengonoceras* **gen. n.** for "*Metengonoceras*" Hyatt, SPATH Ann. Mag. Nat. Hist. **13** p. 508.

†*Epophioceras* **gen. n.** (fam. Arietidae), SPATH Proc. Geol. Ass. **35** p. 204.

†*Erycites*, PALVARINO **521** p. 67.

†*Eumorphoceras*, BISAT **60** p. 96.

Galiteuthis, ROBSON **583** p. 627 & **584** p. 8.

†*Gastrioceras* with *G. crenulatum* & var. *cumbriense*, *G. cancellatum* var. *crencellatum* **sp.** & **varr. n.** Carbon. England, BISAT Proc. Yorks. Geol. Soc. **20** pp. 119–122.—*G. jossae* Vern. **var. n.** *elipsoidalis* Upper Palaeozoic Russia, FRÉDÉRIX Mém. Com. Géol. Petrograd **109** p. 43.—*G.*, DUN & DAVID **211.**

†*Gaudryceras denseplicatum* **var. n.** *nonstriata* Cretaceous Japan, YEHARA Japan J. Geol. Geogr. **3** p. 35.—*G.*, SPATH **626** p. 22.

†*Glyphioceras*, BISAT **60** p. 82.

†*Gomphoceras* with *G. grandtowerensis*, *missouriensis*, **spp. n.**, Devon. Missouri, BRANSON Missouri Bur. Geol. Mines **1922** pp. 115, 156–161.

†*Goniatites* with *G. sphaerico-striatus*, *crenistria* varr. *pseudo-striatus*, *reticulatus* **sp.** & **varr. n.** Carbon. England BISAT Proc. Yorks. Geol. Soc. **20** pp. 73–82.—*G.*, BISAT **59.**

†*Grammoceras* with *G. variabile* d'Orb. **var.** [**n.** ?] *sub-serpentinum* Toarcian Italy, PALVARINO Boll. Soc. Geol. Ital. **42** pp. 61–62, 66–67.

†*Grayiceras* **gen. n.** Pachyceratidae genotype *G. blanfordi* **nom. n.** for *A. nepalensis* Blanf. = *Simbirskites nepaulensis* Gray, SPATH Mem. Geol. Surv. Ind. **9** p. 11.

†*Gyroceras* ? *obliquistriatum* **sp. n.** Ordovician Scotland, REED Geol. Mag. **61** p. 27.—*G.*, FERRONNIÈRE **229** pp. 18–31.

†*Gyrophioceras* **gen. n.** type *Arietites praespiratissmus* Waehner, SPATH Proc. Geol. Ass. **35** p. 201.

†*Hamites klamathensis* **nom. n.** for *H. armatus* And.; *H. siskiyonensis* Anderson **nom. n.** for *H. ellipticus* And., HANNA Proc. Cal. Acad. Sci. **13** p. 169.

†*Hammatoceras*, ERNST **223** p. 45.—*H.*, PALVARINO **521** pp. 64, 67.

†*Harpoceras* with *H. fallaciosum* Bayle var. *differens*, *H.* (*Pseudogrammoceras*) *transiens*, *crassifasciatum*, *subaffine*, *pompeckji lytoceroides*, **spp.** & **var. n.** Lias Germany, ERNST Palaeont. Stuttgart **66** pp. 1–45.—*H.*, CISNEROS. DE.—**127.**—*H.*, PALVARINO **521** pp. 61. 66.

†*Hecticoceras navense* **sp. n.** Jura., ROMAN Trav. Lab. Geol. Lyon **6** p. 74.

†*Hecticoceratoides* **gen. n.** Opellidae with *H. suborientalis* **sp. n.** Jurassic India, SPATH Mem. Geol. Surv. Ind. **9** p. 5.

†*Hemicrioceras*, SPATH **624** p. 78.

†*Hercoglossa mazambensis*, *sheringomensis* **sp. n.** CRICK Trans. Geol. Soc. S. Afr. **26** p. 130.

Heteroteuthis, PIERANTONI **534.**—*H.*, ROBSON **583** p. 632 & **584** p. 11.—

†*Hildoceras*, KILIAN & BLANCHET **379.**—*H.*, PALVARINO **521** pp. 63, 68.

†*Hildoglochiceras* **gen. n.** Opellidae genotype *H. latistrigatum* Uhlig sp., SPATH Mem. Geol. Surv. Ind. **9** p. 6.

†Holcodiscidae **fam. n.**, SPATH Mon. Palaeont. Soc. London **1** 1923 p. 35.

Histioteuthis, GRIMPE, **291.**—*H.*, ROBSON **583** p. 608 & **584** p. 4.

†*Holcolytoceras* **gen. n.**, SPATH Proc. Geol. Ass. **35** p. 189.

†*Holcoteuthis*, CHRISTENSEN **124.**

†*Homoceras* with *H. malhamense*, *striolatum* var. *subglobosa* **sp.** & **var. n.** Carbon. England, BISAT Proc. Yorks. Geol. Soc. **20** pp. 102–112.

†*Homoceratoides* **gen. n.** with *H. prereticulatum* **sp. n.** Carbon. England, BISAT Proc. Yorks. Geol. Soc. **20** pp. 112–114.

†*Hoplites* (*Blanfordia*) *wallichi* (Gray) **var. n.** *hongkongensis* Cretaceous Hongkong, GRABAU Bul. Geol. Surv. China **5** p. 201.

†*Hoplitides danfordi* **sp. n.** Cretaceous, SPATH Geol. Mag. **61** p. 75.

†*Hoplocrioceras*, SPATH **624** p. 78.

†*Huronia* with *H. bigsbyi intermedia, H. engadinensis, paulodilatata,* **spp.** & **var. n.,** Silurian Michigan, FOERSTE Contrib. Geol. Univ. Mich. **2** pp. 42–62.

†*Huroniella* **gen. n.** Genotype *Huronia inflecta* Parks, FOERSTE Contrib. Geol. Mus. Univ. Mich. **2** p. 27.—*H.* with *H. ehlersi* **sp. n.** Silurian Michigan, FOERSTE Contrib. Geol. Univ. Mich. **2** pp. 39–42.

†*Hypacanthoplites* **gen. n.** Douvilleiceratidae, SPATH Mon. Pal. Soc. **85** p. 64.

†Idoceratidae **fam. n.,** SPATH Mem. Geol. Surv. Ind. **9** p. 11.

Illex, GRIMPE, **291.**

†*Jovellania,* FERRONNIÈRE **229** p. 11.

†*Juddiceras* **gen. n.** SPATH Geol. Mag. **61** p. 84.

†*Kammerkarites* **gen. n.,** SPATH Proc. Geol. Ass. **35** p. 195.

†*Katroliceras* **gen. n.** Ataxioceratidae genotype *A. pottingeri* J. de. C. Sow. 1840, SPATH Mem. Geol. Surv. Ind. **9** p. 15.

†*Kheraiceras* **gen. n.** Macrocephalitidae genotype *K. cosmopolita* Parona & Bonarelli sp. = *Stephanoceras bullatum* Waagen p. 129 pl. xxxii fig. 1, SPATH Mem. Geol. Surv. Ind. **9** p. 7.

†*Kilianella* ? *pexiptychoides* **sp. n.** Cretaceous, SPATH Geol. Mag. **61** p. 76.

†*Kionoceras* with *K. angulatum* **var.** *deflectostriatum, latouri, granosistriatum,* **var.** & **spp. n.,** Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** pp. 157–159.—*K.,* FOERSTE **237** p. 29.

†*Lillia,* PALVARINO **521** p. 63.

Liocranchia with *L. intermedia* **sp. n.** S. Africa, ROBSON Union S. Af. Fish. Mar. Biol. Surv. Special Repts. **9** p. 6.—*L.,* ROBSON **583** p. 622.

†*Lissoceratoides* **gen. n.,** SPATH Mon. Palaeont. Soc. London **1** 1923 p. 33.

Loligo pealii, MOORE **461.**—*L. p.,* WHITE **703.**—*L.* ROBSON **583** pp. 651–654 & **584** p. 14.—*L.,* CAMPS **104** p. 315.

†*Lusitanoceras* **gen. n.** with *L. algarviensis* **sp. n.** Carboniferous Portugal, PEREIRA DE SOUSA Bul. Soc. Géol. Paris **23** p. 304.

? *Lycoteuthis,* ROBSON **583** p. 599 & *L.,* **584** p. 2.

†*Lyoceras,* PALVARINO **521** p. 62.

†*Lytoceras ilanense* **sp. n.** Jura, STRÉMOOUKHOF Bul. Com. Géol. Sect. Moscou Petrograd **1** p. 271.—*L.,* PALVARINO **521** pp. 60, 65.

†*Lytotropites* **gen. n.** for *Ectocentrites fucinii* Bon, SPATH Proc. Geol. Ass. **35** p. 200.

†*Mammites nodosus* Sch. *chivensis* & *M.* (?) *rusticus* Sow. *amudariensis,* **subspp. n.,** Upper Cretaceous Turkestan ARKHANGUELSKI Mem. Com. Geol. Petrograd **152** pp. 51–54.

†*Mayaites* **gen. n.** Pachyceratidae with *M. lemoini* **nom. n.** for "*Steph.*" *maya* Waagen, SPATH Mem. Geol. Surv. Ind. **9** p. 9.

Mastigoteuthis, ROBSON **583** p. 617 & **584** p. 5.

†*Megaphyllites,* GEMMELLARO **264** p. 142.

†*Megateuthis,* CHRISTENSEN **124.**

†*Melchiorites* **gen. n.,** SPATH Mon. Palaeont. Soc. London **1** 1923 p. 33.

†"*Metengonoceras*" Hyatt, SPATH **623** p. 508.

†*Metoicoceras wyomingensis* **sp. n.** Cretaceous Wyoming, REAGAN Pan-Amer. Geol. **41** p. 181.

†*Metophioceras* **gen. n.** with *M. janus, gracile,* **spp. n.,** Lias, SPATH Proc. Geol. Ass. **35** pp. 202–203.

Moroteuthis, ROBSON **583** p. 595 & **584** p. 2.

†*Mortoniceras,* YABE & SHIMIZU **723.**

†*Nautilus* with *N. Rhyncolithes ferrens* **sp. n.** Jura. Germany, MOOS Zs. D. geol. Ges. **76** pp. 192–199.—*N.,* BRANSON **89** p. 124.—*N.,* DEMANET **200** p. 240.—*N.,* MARSHALL, P. **432.**

†*Neactinoceras* **gen. n.** Opellidae type *Ammon. micromphalus* Phillips Oppelidae, SPATH Mem. Geol. Surv. Ind. **9** p. 5.

†*Neocomites,* BAUMBERGER **48.**

†Neocomitidae, SPATH **626** p. 31.

†*Neocosmoceras* **gen. n.** BLANCHET Trav. Lab. geol. Grenoble **13** p. 78.

†*Neocraspedites* **gen. n.** type "*Craspedites*" *semilaevis* v. Koenen, SPATH Mem. Geol. Surv. Ind. **9** p. 17.—*N. speetonensis* **sp. n.** Cretaceous, SPATH Geol. Mag. **61** p. 74.

†*Neolissoceras* **gen. n.**, SPATH Mon. Palaeont. Soc. London **1** 1923 p. 33.

†*Nephriticeras hindskawi* **sp. n.** Devon. Michigan, EHLERS & HUSSEY Paprs. Mich. Acad. Sci. **1** p. 249.—*N.*, BRANSON **89** p. 158.

†*Nomismoceras*, BISAT **60** p. 96.

†*Nuculoceras* **gen. n.** with *N. nuculum* **sp. n.** Carbon. England, BISAT Proc. Yorks. Geol. Soc. **20** p. 100.

†*Obtusicostites buckmani* **nom. n.** for *P. obtusicosta* Waagen, SPATH Mem. Geol. Surv. Ind. **9** p. 13.

Octopodoteuthopsis, ROBSON **583** p. 606 & **584** p. 4.

Octopus macropus, BOTAZZI & BERGAMI **81**.—*O. m.*, BOTAZZI & VALENTINI **82**.—*O. vulgaris*, CRAIFALEANU **165**, **166** & **167**.—*O. v.*, TURCHINI **675**, **676**, **677** & **679**.

†*Odontodiscoceras* **gen. n.**, SPATH Geol. Mag. **61** p. 88.

†*Ogtagoniceras* **gen. n.**, SPATH Geol. Mag. **61** p. 88.

†*Olcostephanus* with *O.* (*Rogersites*) & *O.* ("*Astieria* ?") *subfilosus* **sp. n.** Cretaceous, SPATH Geol. Mag. **61** pp. 75, 76.

†*Onoceras mckenzicum* **sp. n.** Silurian U.S.A., SWARTZ & PROUTY Maryld. Geol. Surv. Silur. Mem. **1923** p. 498.

†*Oppelia gsheliensis* **sp. n.** Jura C. Russia, NIKITIN Mém. Com. Géol. Petrograd **70** pp. 23, 49.—*O. steraspis*, GÜRICH **294**.

Ommastrephes todarus, [ANON] **24**.

†*Ormoceras*, FOERSTE **237** p. 62.

†*Orthoceras* with *O. bassleri*, *mckenzicum*, **spp. n.**, Silurian U.S.A., SWARTZ & PROUTY Maryld. Geol. Surv. Silur. Mem. **1923** p. 495.—*O.* with *O.* ? *carpentieri* **sp. n.** Devonian France, FERRONNIÈRE Bul. soc. sci. nat. Nantes **1** pp. 1–11, 13–15.—*O.*, *lateraleformis* **sp. n.** Upper Palaeozoic Russia, FRÉDÉRIX Mém. Com. Géol. Petrograd **109** p. 39.—*O.* with *O. macadamense*, *ludense* var. *camerini*, *antigonishense*, *conferteseptatum*, *marklandense*, **spp.** and **var. n.** Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** pp. 151–155.—*O.*, BRANSON **89** pp. 123–124, 157.—*O.*, DEMANET **200** p. 239.—*O.*, GEMELLARO **264** p. 135.—*O.*, FOERSTE **237** p. 30.

†*Oxynoticeras*, KILIAN & BLANCHET **379**.

†*Pachydiscus*, HÄGG **302** p. 17.

†*Pellasiceras*, NEAVERSON **476**.

†*Paracrioceras statheri* **sp. n.** Cretaceous, SPATH Geol. Mag. **61** p. 77.—*P. statheri*, SPATH **627**.

†*Paragattendorfia* cf. *humilis* **gen.** & **sp. n.** Devon. Germany, SCHINDEWOLF Senckenbergiana **6** p. 105.

†*Paranautilus*, GEMMELLARO **264** p. 137.

†*Parancyloceras*, SPATH **624** p. 78.

†*Parapachydiscus zaccagnai* **sp. n.** Cretaceous Tripoli, FUCINI Mem. Descr. Cart. Geol. Ital. **18** p. 120.

†*Parapatoceras* **gen. n.** Reineckeidae type *A. calloviensis* Morris, SPATH Mem. Geol. Surv. Ind. **9** p. 12.

†*Pararnioceras alcinoiforme* **nom. n.** for *Ar. rotiformis* Wright, SPATH Proc. Geol. Ass. **35** p. 208.—*P.*, TRUEMAN **673**.

†*Paratobelus* **gen. n.** genotype *Belemnites oxys* Ten. Wds., WHITEHOUSE Geol. Mag. **61** p. 410.

†*Parengonoceras* **gen. n.** for *Amaltheus ebrayi* de Loriol, SPATH Ann. Mag. Nat. Hist. **13** p. 508.

†*Paroniceras*, PALVARINO **521** p. 63.

†*Peltocrioceras* **gen. n.**, SPATH Geol. Mag. **61** p. 85.

†Peltoceratidae **fam. n.** with *Peltoceratoides* **gen. n.** genotype *P. semirugosus* Waagen; *Gregoryceras* **gen. n.** for Argovian group of "*Peltoceras*" *transversarium* Quens.; *Epipeltoceras* **gen. n.** type *A. bimammatus* Quens., SPATH Mem. Geol. Surv. Ind. **9** p. 18.

†*Peltolytoceras* **gen. n.**, SPATH Proc. Geol. Ass. **35** p. 194.

†*Perisphinctes* with *P.* (*Grossouvria*) *asinus* **sp. n.** Jura. S. Russia, ZATWORNITZKY Bul. Com. Géol. Petrograd **33** p. 553.—*P. quadriscissus* **sp. n.** Jura. Poland : *P. aff. pellati* **nom. n.** = *biplex* de Loriol 1875, LEWINSKI Mém. sci. géol. Paris **24** pp. 88–89.—*P. tenuifurcatus* **sp. n.** Jura. C. Russia, NIKITIN Mém. Com. Géol. Petrograd **70** pp. **17**, 44.

†Perisphinctidae, SPATH **625** p. 14.

†*Phylloceras*, NEAVERSON **476.**—*P.*, PALVARINO **521** pp. 60, 66, 67.—*P.*, SPATH **626** p. 15.

†Phylloceratidae, SPATH **625** p. 4.

†*Pinacoceras regiforme* **sp. n.** Trias New Siberia, DIENER Bul. Acad. Sci. Russ. **8** p. 900.

†*Pictetia*, SPATH **626** pp. 27–30.

†Pictonidae **fam. n.** SPATH Mem. geol. Surv. Ind. **9** p. 13.

†*Placenticeras* with *P. kysylcumensis* **sp. n.** Upper Cretaceous Turkestan, ARKHANGUELSKI Mem. Com. Geol. Petrograd **152** pp. 36–45.

†*Placites*, GEMMELLARO **264** p. 141.

Plauctoteuthis, ROBSON **582.**

†*Pleuronautilus*, COX **162** p. 88.

†*Poecilomorphus*, PALVARINO **521** p. 62.

†*Polymorphites*, BEURLEN **56** p. 156.

†*Polystomiceras* **gen. n.** Lytoceratidae, SPATH Mem. Geol. Surv. Ind. **9** p. 5.

†*Polyplectus*, PALVARINO **521** p. 62.

†*Polyptychites pyritosus, sublatissimus, euryptychoides*, **spp. n.**, Cretaceous, SPATH Geol. Mag. **61** p. 75.

†*Popanites*, JEANNET **363** p. 362.

†*Prionotropis*, ARKHANGUELSKI **29** pp. 45–46.

†*Proceratites*, HANNA **309** p. 178.

†*Prochelonicerasgen. n.* Douvilleiceratidae, SPATH Mon. Pal. Soc. **85** p. 64.

†*Prolecanites*, BISAT **60** p. 122.

†*Protancyloceras* **gen. n.**, SPATH Geol. Mag. **61** p. 86.

†*Protohoplites*, SPATH **626** p. 65.

†*Protokionoceras*, FOERSTE **237** p. 30.

†*Provirgatites* **subgen. n.** with *P. alexandrae* **sp. n.** Jura. Poland, LEWINSKI Mém. Soc. Géol. Paris **24** pp. 93–97.

†*Pseudobactrites quadriangulatum, bicarinatum*, **spp. n.**, Devon. France, FERRONNIÈRE Bul. soc. sci. Nantes **1** p. 16.

†*Pseudobelus*, CHRISTENSEN **124.**

†*Pseudocrioceras*, SPATH **624** p. 78.

†*Pseudoosterella* **gen. n.**, SPATH Geol. Mag. **61** p. 88.

†*Pseudosaynella* **gen. n.**, SPATH Mon. Palaeont. Soc. London **1** 1923 p. 66.

†*Pseudoschlotheimia* **gen. n.**, SPATH Proc. Geol. Ass. **35** p. 194.

†*Pseudothurmannia* **gen. n.**, SPATH Mon. Palaeont. Soc. London **1** 1923 p. 66.

†*Psiloceras regnesi* **nom. n.**, SPATH Proc. Geol. Ass. **35** p. 190.—*P.*, KILIAN & BLANCHET **379.**

†*Pulchellia*, COLLET **146.**

†*Puzosia chivensis* **sp. n.** Upper Cretaceous Turkestan, ARKHANGUELSKI Mem. Com. Geol. Petrograd **152** p. 34. — *P.* with *P. sharpei, communis*, **spp. n.**, Gault, SPATH Mon. Palaeont. Soc. London **1** 1923 pp. 42–49.

Pyrgopsis, ROBSON **583** p. 619 & **584** p. 5.

†*Raimondiceras* **gen. n.**, SPATH Geol. Mag. **61** p. 87.

†*Rasenia* with *R. prostephanoides* **sp. n.** Jura. Germany, BEURLEN Centralbl. Min. Stuttgart **1924** pp. 245–252, 281–288.—*R.*, NEAVERSON **476.**

†*Reineckia* (?) *humilis* **sp. n.** Jura. S. Russia, ZATWORNITZKY Bul. Com. Géol. Petrograd **33** p. 548.

†*Reticuloceras* **gen. n.**, BISAT. Proc. Yorks. Geol. Soc. **20** pp. 114–119.

†*Rhabdoceras*, GEMMELLARO **264** p. 138.

†*Rhacophyllites*, GEMMELLARO **264** p. 142.—*R.*, PALVARINO **521** p. 68.

Rhombosepion with *R. hieronis* **sp. n.** Off Cape Town, ROBSON Proc. Zool. Soc. **1924** pp. 641–647.

Rossia enigmatica **sp. n.** Off Cape Town, ROBSON Proc. Zool. Soc. **1924** p. 635.—*R.*, CAMPS **104** p. 313.

†*Sagittoceras*, BISAT **60** p. 82.

†*Scaphites amudariensis* **sp. n.** Upper Cretaceous Turkestan, ARKHANGUELSKI Mem. Com. Geol. Petrograd **152** p. 56.

†*Schloenbachia* with *S. kiowana* **sp. n.** Cretaceous Kansas, TWENHOFEL Bul. State Surv. Kansas **9** p. 84.—*S. tehamaensis* **sp. n.** Cretaceous California, REAGAN Pan-Amer. Geol. **41** p. 182.

†*Schlotheimia similis, pseudomoreana, phoenix, quadrata,* **spp. n.**, Lias, SPATH Proc. Geol. Ass. **35** pp. 197–198.

†Seguenziceratidae **fam. n.**, SPATH Proc. Geol. Ass. **35** p. 192.

Semirossia, ROBSON **584** p. 10.

Sepia officinalis, DUVAL **213.**—*S. o.*, S[TORROW] **643.**—*S.*, ROBSON **584** p. 11.

Sepiella cyanea **sp. n.** S. Africa, ROBSON Union S. Af. Fish. Mar. Biol. Surv. Special Repts. **9** p. 13.—*S.*, ROBSON **583** p. 648.

†*Siemiradzkia*, NEAVERSON **476.**

†Simoceratidae, SPATH **625** p. 19.

†*Smithoceras* **nom. n.** for *Polycyclus* Mojs., HANNA Proc. Cal. Acad. Sci. **13** p. 180.

†*Sonninia*, THALMANN **654.**

†*Spectoniceras* with *S. subbipliciforme* **sp. n.** Cretaceous, SPATH Geol. Mag. **61** p. 76.

†*Sphenaturia*, IHERING, VON, **350.**

Spirula, DELAP **199.**

†*Spitticeras*, BAUMBERGER **48.**

†*Spitidiscus subrotula, inflatiformis,* **spp. n.**, Cretaceous, SPATH Geol. Mag. **61** p. 76.

†*Stenarcestes*, GEMMELLARO **264** p.139.

†*Stokesoceras* with *S. romingeri, engadinense,* **spp. n.**, Silurian Michigan, FOERSTE Contrib. Mus. Geol. Univ. Mich. **2** pp. 76–85.

†*Subastieria* **gen. n.** type *Olcostephanus* (*Astieria*) *sulcosus*, SPATH Mon. Palaeont. Soc. London **1** 1923 p. 32.—*S. decipiens.* **sp. n.** Cretaceous, SPATH Geol. Mag. **61** p. 76.

†*Subgrossouvria* **gen. n.** Proplanulitidae with *S. morlay-daviesi* **nom. n.** for *P. aberrans* Waagen, SPATH Mem. Geol. Surv. Ind. **9** p. 13.

†*Subkossmatia* **gen. n.** Pachyceratidae genotype *A. opis* Sow. non Waagen 1840 SPATH Mem. Geol. Surv. Ind. **9** p. 11.

†*Subneumayria* **gen. n.** type "*Neumayria*" *ordovezi* Burckhardt, SPATH Mem. Geol. Surv. Ind. **9** p. 17.

†*Suboosterella* **gen. n.**, SPATH Geol. Mag. **61** p. 88.

†*Subsaynella* **gen. n.**, SPATH Mon. Palaeont. Soc. London **1** 1923 p. 31.

†*Tetrabelus* **gen. n.** genotype *Belemnites seclusas* Blanf., WHITEHOUSE Geol. Mag. **61** p. 413.

†*Tetragonites*, SPATH **626** p. 25.

†*Tetrameroceras cumberlandicum* & var. *magnacameratum* **sp.** & **var. n.** Silurian U.S.A., SWARTZ & PROUTY Maryld. Geol. Surv. Silur. Mem. **1923** pp. 498–499.

†*Thoracoceras erro* **sp. n.** Silurian Nova Scotia, MCLEARN Geol. Surv. Canada **137** p. 159.

Todaropsis, ROBSON **583** p. 614 & **584** p. 5.

†*Tonohamites* **gen. n.**, SPATH Geol. Mag. **61** p. 85.

†*Torquatisphinctes* **gen. n.** Ataxioceratidae genotype *A. torquatus* J. de C. Sow. 1840, SPATH Mem. Geol. Surv. Ind. **9** p. 15.

†*Toxoceratoides* with *T. sheppardi* **sp. n.** Cretaceous, SPATH Geol. Mag. **61** p. 78.—*T. sheppardi*, SPATH **627.**

†*Tragolytoceras* **gen. n.**, SPATH Proc. Geol. Ass. **35** p. 194.

†*Trizonoceras*, BISAT **60** p. 95.

†*Trochoceras* (?) *marylandicum* **sp. n.** Silurian U.S.A., SWARTZ & PROUTY Maryld. Geol. Surv. Silur. Mem. **1923** p. 497.

†*Uhligites hectori* **nom. n.** for *Ammonites* (Kauhia) in Hector, SPATH Mem. Geol. Surv. Ind. **9** p. 6.

Velodona, ROBSON **581** & **583** p. 655.

†*Vestinautilus*, DEMANET **200** p. 240.

†*Virgatites* (*Provirgatites* ?) *bohdanowiczi* **sp. n.** Jura. Poland, LEWINSKI Mém. soc. géol. Paris **24** p. 97.

†Virgatitidae **fam. n.**, SPATH with *Pallasiceras* **gen. n.** genotype *P. rotundum* J. Sow., *Holcostephanoides* **gen. n.** type *Ol. acuticostatus* Mich., *Epivirgatites* **gen. n.** type "*P.*" *nikitini* Mich. = "*Perisphinctes polygyratus* (Trautschold ?) Pavlow, SPATH Mem. Geol. Surv. Ind. **9** pp. 16–17.

†*Waehneroceras tomesi*, *iapetus*, **spp. n.** Lias, SPATH Proc. Geol. Ass. **35** pp. 193, 195.

†*Welschia*, NEAVERSON **476**.

†*Xipheroceras*, TRUEMAN **673**.

INCERTAE SEDIS.

Mandarina, PISLBRY Tryon Man. Conch. Ser. 2 **9** 1895 p. 214. [Omitted from previous Records.]

†*Oxydiscus compressus* **sp. n.** Silurian U.S.A., SWARTZ & PROUTY Maryld. Geol. Surv. Silur. Mem. **1923** p. 483.

Pentatacnia, A. SCHMIDT Abh. Natw. Ver. Sachsen u. Thuringen **1** 1855 p. 18. [Omitted from previous Records.]

†*Poleumita transversa*, *mckenzica*, **spp. n.**, Silurian U.S.A., SWARTZ & PROUTY Maryld. Geol. Surv. Silur. Mem. **1923** p. 487.

Procyclotopsis **nom. n.** for *Cyclotellina* Wenz 1923, WENZ Senckenbergiana **6** p. 223.

†*Rimetella* **nom. n.** for *Ectinochilus* Cossmann, HANNA Proc. Cal. Acad. Sci. **13** p. 179.

†*Scalez petrolia* **gen. & sp. n.** Pliocene California, HANNA & GAYLORD Proc. Cal. Acad. Sci. **13** p. 147.

Vitrinopugio, IHERING Zs. wiss. Zool. Leipzig **54** 1892 p. 401. [Omitted from previous Records.]

IX. CRUSTACEA

ARRANGED BY

W. L. SCLATER, M.A.

CONTENTS

	PAGE
I. Titles	1
II. Subject Index	16
Distribution	18
III. Systematic Index	20

I.—TITLES.

1.—Adler, G. et **Jespersen,** P. Variations saisonnières chez quelques Copépodes planctoniques marins. Medd. Havunders. Kjøbenhavn Ser. Plankton **2** no. 1 1920 pp. 1–46.

2.—Alpatov, W. W. Die Decapodenkrebse des Weissen, Barents und Karameeres nach den Materialen der Expedition des Instituts im Jahre 1921. Ber. Wissensch. Meeresinst. Moskau Lief **7** 1923 pp. 1–36. [Russian with German rés.]

3.—Alpatov, W. W. Eine für den Baikalsee neue Wasserasselspecies (zugleich ein Vergleich der Baikalasseln mit den europäischen und amerikanischen Formen der Gattung *Asellus* Geoffroy). Russ. Hydrobiol. Zeits. Saratov **2** 1923 pp. 64–66. [Russian and German rés.]

4.—Alpatov, W. W. Die Definition der untersten systematischen Kategorien vom Standpunkte des Studiums der Variabilität der Ameisen und der Crustaceen. Zool. Anz. Leipzig **60** 1924 pp. 161–168.

5.—Alverdes, F. Das Verhalten positiv phototaktischer Daphnien gegen eine doppelte Lichtquelle. Zs. wiss. Zool. Leipzig **123** 1924 pp. 359–371 6 figs.

6.—Amberson, W. R. Kinetics of the bioluminescent reaction in *Cypridina.* I. pp. 517–534 1 pl. 3 figs. II pp. 535–558 7 figs. J. Gen. Physiol. New York **4** 1922.

7.—Annandale, N. Cirripedes associated with Indian Corals of the families Astraeidae and Fungidae. Mem. Ind. Mus. Calcutta **8** 1924 pp. 61–68 1 pl.

8.—Anon. Eight-six generic names in Crustacea placed on the Official List of generic names: in Opinions rendered by the International Commission on Zoological Nomenclature. Smithsonian Misc. Coll. **73** 1922 pp. 23–31. [Opinion no. 73.]

9.—Apstein, C. Weiteres über *Glyptonotus entomon.* Wissens. Meeresunters. Kiel Abt. Helgoland **15** no. 3 1923 pp. 1–4.

10.—Arcangeli, A. Primo contributo alla fauna degli Isopodi degli Astroni. Ann. Mus. Zool. Univ. Napoli (N. S.) no. 10 1922 pp. 1–2.

11.—Arcangeli, A. Isopodi terrestri del Museo Zoologico della R. Università di Napoli. Ann. Mus. Zool. Univ. Napoli **5** no. 2 1922 pp. 1–8 1 fig.

12.—Arcangeli, A. Per una migliore conoscenza della fauna isopodologica della Libia. Monitore Zool. Ital. Firenze **35** 1924 pp. 223–233.

13.—Artom, C. Ancora del tetraploidismo dei maschi dall'*Artemia salina* di Odessa in relazione con alcuni problemi generali di genetica. Att. R. Accad. Naz. Linc. Roma (5) **33** 1st Sem. 1924 pp. 34–36.

14.—Auerbach, M., **Maerker,** W. und **Schmalz,** J. Hydrographisch-biologische Bodensee-Untersuchungen. 1. Ergebnisse der Jahre 1920–1922 Arch. Hydrobiol. Stuttgart Suppl. Bd. **3** 1924 pp. 597–738 4 pls.

15.—Baker, F. *Vogdesella,* a new genus-name for a Paleozoic Crustacean. Proc. Cal. Acad. Sci. San Francisco **13** 1924 p. 187.

16.—Balss, H. Ostasiastische Decapoden. V. Die Oxyrhynchen und Schlussteil. (Geographische Uebersicht der Decapoden Japans). Arch. Natg. Berlin **90** Abt. A Hft. 5 1924 pp. 20–84 1 pl. 2 text-figs.

17.—Balss, H. Studien an fossilen Decapoden II. Das Verhältnis der rezenten zu den fossilen Eryoniden. Palaeont. Zs. Berlin **6** 1924 pp. 174–184 9 figs.

18.—Balss, H. Westindische Decapoden. Zool. Anz. Leipzig **61** 1924 pp. 177–182 5 figs.

19.—Balss, H. Über Anpassungen und Symbiose der Paguriden. Eine zusammenfassende Übersicht. Zs. Morph. Ökol. Berlin **1** 1924 pp. 752–792 35 figs.

20.—Bär, G. Über Cladoceren von der Insel Ceylon. (Fauna et Anatomia ceylanica no. 14.) Jenaische Zs. Natw. **60** 1924 pp. 83–126 pl. vi 10 text-figs.

21.—Barnard, K. H. Contributions to the Crustacean Fauna of South Africa. 7. Cirripedia. Ann. S. Afr. Mus. Cape Town **20** 1924 pp. 1–103 1 pl.

22.—Barnard, K. H. Contributions to our knowledge of the fauna of South-West Africa. II. Crustacea Entomostraca, Phyllopoda. Ann. S. Afr. Mus. Cape Town **20** 1924 pp. 213–230 pl. xvi. III Crustacea Isopoda Terrestria t.c. pp. 231–236 4 figs.

23.—Barnard, K. H. Description of a new genus and species of Isopod Crustacean belonging to the family Bathynomidae, procured by the South African Marine Survey. Rep. Fish. & Marine Biol. Surv. Cape Town no. **4** 1924 pp. 1–4 1 pl.

24.—Barnard, K. H. The digestive canal of Isopod Crustaceans. Trans. R. Soc. S. Afr. Cape Town **12** 1924 pp. 27–301 1 pl. 1 text-fig.

25.—Barney, R. W. Ostracoda in: British Antarctic ("Terra Nova") Expedition 1910. Natural History Reports. Zool. vol. iii Arthropoda pp. 175–190 6 text-figs. London (Trustees Bt. Mus.) 1921 4 to.

Bassler, R. S. *vide* Ulrich.

26.—Behning, A. Studien über die Malakostraken des Wolgabassins. Intern. Rev. Hydrobiol. Leipzig **12** 1924 pp. 228–247 map 4 text-figs.

27.—Behning, A. L. Über Kaspisee-Krustaceen im Wolgabassin. Russ. Hydrobiol. Zeits. Saratow **3** 1924 pp. 51–54. [Russian with German rés.]

28.—Beklemischev, W. Ueber verschiedene Arten tödtlicher Wirkung von Electrolytenlösungen auf Entomostraca. Bul. Inst. Rech. Biol. Perm **3** 1924 pp. 95–106. [Russian with German rés.]

29.—Becklemichew, W. N. Sur les Péracanides fluviatiles de la région Ponto-Caspienne. Russ. Hydrobiol. Zeits. Saratow **2** 1923 pp. 213–218. [Russian and French rés.]

30.—Bennitt, R. The migration of the retinal pigment in Crustaceans. J. Exp. Zool. Philadelphia **40** 1924 pp. 381–435 4 figs.

31.—Blaas, E. Über die Rotfärbung von *Diaptomus vulgaris.* Arb. Zool. Inst. Univ. Innsbruck **1** 1923 pp. 1–18 4 figs.

32.—Boas, J. E. V. Die verwandtschaftliche Stellung der Gattung *Lithodes.* Biol. Meddel. K. Danske Videns. Selsk. Kjøbenhavn **4** no. 4 1924 pp. 1–34 28 figs.

33.—Bonde, C. van. Note on some abnormalities in the Cape Crawfish (*Jasus lalandii*). Trans. R. Soc. S. Afr. Cape Town **12** 1924 pp. lvii–lix.

34.—Bottazzi, F., Lorenzis, P. de, **Stasi,** G. La grotta "Zinzulusa" in terra d'Otranto e il retrovamento in essa di *Thyphlocaris.* Riv. Biol. Roma **5** 1923 pp. 301–308 5 figs.

35.—Bowkiewicz, J. *Lynceus brachyurus* aberr. *isorhynchus* Daday im Lichte des Gesetzes der weiblichen Präponderanz. Zool. Anz. Leipzig **61** 1924 pp. 193–200.

36.—Boyce, D. R. The Calling Crabs of Durban Bay, *Uca annulipes* (Milne-Edwards). S. Afric. J. Nat. Hist. Pretoria **4** 1924 pp. 250–252.

37.—Brady, G. S. Copepoda: in Scientific Reports. Australian Antarctic Expedition 1911–1914 Ser. C **5** pt. 3 1918 pp. 1–48 15 pls.

38.—Brady, G. S. Cladocera and Halocypridae: in Scientific Reports Australian Antarctic Expedition 1911–1914 Ser. C **5** pt. 4 1918 pp. 1–11 2 pls.

39.—Brauner, B. Prof. Alois Mrázek. Nature London **114** 1924 p. 322.

40.—Brehm, V. Zur Mikrofauna javanischen Binnengewässer. Treubia Batavia **3** 1923 pp. 222–229 9 figs.

41.—Brehm, V. Die Zisternen-Entomostraken der Expedition zur Erforschung der Limnologie der Sahara-Gebiete. Zool. Anz. Leipzig **59** 1924 pp. 308–312 6 figs.

42.—Brian, A. Copepoda: in Parasitologia Mauritanica. Matériaux pour la faune parasitologique en Mauritanie. Pp. 4–66 67 figs. Bul. Com. Etudes Hist. Sci. Afr. Occident. Franç. 1924.

43.—Broch, H. Parasitologia Mauritanica. Matériaux pour la faune parasitologique en Mauritanie. Bul Com. Etud. Hist. Sci. Afr. Occ. Fr. 1924 pp. 1–21 6 figs. [sep. pag.]. [*See also* **Monod** no. **215.**]

44.—Broch, H. La fauna des Cirripèdes de l'Afrique occidentale d'apres nos dernières connaissances. Bul. Soc. Sci. Maroc Rabat **4** 1924 pp. 202–205.

45.—Broch, H. Cirripedia thoracica von Norwegen und dem norwegischen Nordmeere. Eine systematische und biologisch-tiergeographische Studie. Vidensk. Skrift. Kristiania **1** 1924 no. 17 pp. 1–121 3 pls. 35 text-figs.

46.—Bronstein, Z. S. Beiträge zur Ostrakodenfauna des Gouv. Moskau. Russ. Hydrobiol. Zeits. Saratow **3** 1924 pp. 80–88 3 figs. [Russian with German rés.]

47.—Brues, C. T. Observations on animal life in the thermal waters of Yellowstone Park, with a consideration of the thermal environment. Proc. Amer. Acad. Arts Sci. Boston **59** 1924 p. 369–458 5 figs. [Crustacea p. 412.].

48.—Bruun, A. F. On *Chiridothea entomon* (L.) in the southern and western Baltic. Publ. explor. mer. Copenhague **83** 1924 pp. 1–12 3 figs.

49.—Buddenbrock, W. von. Untersuchungen über den Mechanismus der phototropen Bewegungen. Wissen. Meeresunters. Kiel Abt. Helgoland **15** 1923 no. 5 pp. 1–19 10 figs.

50.—Burckhardt, G. Zooplankton aus ost- und süd-asiatischen Binnengewässern. B. Bosminiden. Rev. Hydrob. Aarau **2** 1924 pp. 217–242 17 figs.

51.—Calman, W. T. An abnormal specimen of the Edible Crab (*Cancer pagurus*). Ann. Mag. N. H. London (9) **14** 1924 pp. 326–328 fig.

52.—Cannon, H. G. On the development of an Estherid Crustacean. Phil. Trans. R. Soc. **B 212** 1924 pp. 395–430 pls. xviii–xxiv 6 text-figs.

53.—Capra, F. Sulla fauna della Grotta del Pugnetto in Val di Lanzo. Atti Acc. Sci. Torino **59** 1924 pp. 69–77.

54.—Carl, J. Amphipodes. Catalogue Invert. Suisse. Fasc. 15 pp. 1–27 27 figs. Genève (Georg) 1923 8vo.

55.—Caroli, E. Sulla presenza di *Penilia schmackeri* Richard nel golfo di Napoli. Boll. Soc. Nat. Napoli **35** 1924 pp. 96–99.

56.—Caroli, E. Di una specie italiana di *Typhlocaris* (*T. salentina* sp. n.) con osservazioni morfologiche e biologiche sul genere. Boll. Soc. Nat. Napoli **35** 1924 pp. 265–267.

57.—Caroli, E. La statocisti di *Typhlocaris.* Rend. Union. Zool. pp. 40–43 in Monitore Zool. Ital. Firenze **35** 1924.

58.—Cate, J. ten. Contributions à la physiologie comparée du canal stomaco-intestinal. I—Les movements rythmiques spontanés de l'intestin d'Ecrevisse. Arch. Neerland. Haarlem **9** 1924 pp. 172–198.

59.—Chahovitch, X. Contribution à l'étude de l'immunité chez les Crustacés Décapodes. Effets de l'action des cultures microbiennes in vivo pp. 96–97. Existence d'une immunité naturelle antitoxique chez les Crustacés Decapodes pp. 98–99. Ann. Soc. Linn. Lyon **70** 1924.

60.—Chapman, F. On some Foraminifera and Ostracoda from the Cretaceous of Umzamba River, Pondoland. Trans. Geol. Soc. S. Africa Johannesburg **26** 1924 pp. 1–6 1 pl.

61.—Chappuis, P. A. Descriptions préliminaires de Copépodes nouveaux de Serbie. Bul. Soc. Stiinte Cluj **2** pt. 2 1924 pp. 27–45 44 figs.

62.—Chappuis, P. A. Sur quelques Harpacticides de la Nouvelle-Guinée et de Patagonie. Bul. Soc. Stiinte Cluj **2** pt. 2 1924 pp. 96–103 5 figs.

63.—Chatton, E. et **Harant,** H. Notes sur les Copépodes Ascidicoles. XIV.—*Lequerrea Perezi* n. g., n. sp., enterocolien parasite d'une Ascidie simple pp. 347–354 1 fig. XV. Sur trois formes nouvelles du genre *Enterocola* P. J. van Bened. Etat actuel de la systématique des Enterocolinae É. subf. pp. 354–364 3 figs. XVI. Le nouveau genre *Haplostomella.* Deux espèces nouvelles da ce genre. Remarques sur les oostégites et la 5e paire de péréipodes. Pp. 398–406 2 figs. XVII. Le nouveau genre *Haplostomides* et deux espèces nouvelles de ce genre: *H. scotti* et *H. brementi* pp. 406–412 2 figs. XVIII. *Haplostoma canui* n. sp. État actuel de la systématique des Haplostominae n. subf. Le nouveau genre *Haplosaccus* pp. 413–422 1 fig. Bul. Soc. Zool. Paris **49** 1924.

64.—Chevreux, E. et **Gauthier,** H. Description d'un nouveau Gammare de Tunisie. Bul. soc. hist. nat. Alger **15** 1924 pp. 53–55 1 pl. 1 text-fig.

65.—Chilton, C. Fauna of the Chilka Lake. Tanaidacea and Isopoda. Mem. Ind. Mus. Calcutta **5** 1924 pp. 875–895 1 pl. 10 text-figs.

66.—Chilton, C. Occurrence in South America of the Shore Isopod, *Ligia novae-zelandiae* Dana. N. Zealand J. Sci. Techn. Wellington **6** 1924 pp. 287–288.

67.—Chilton, C. Some New Zealand Amphipoda. no. 4 pp. 269–280 9 figs.; no. 5 pp. 631–637 20 figs. Trans. Proc. N. Zeal. Inst. Wellington **55** 1924.

68.—Chopra, B. Isopoda of the Siju Cave, Garo hills, Assam. Rec. Ind. Mus. Calcutta **26** 1924 pp. 49–59 4 figs.

69.—Chopra, B. The Fauna of an Island in the Chilka Lake. On two myrmecophilous Isopods from Barkuda. Rec. Ind. Mus. Calcutta **26** 1924 pp. 523 528 5 figs.

70.—Clark, A. H. Parasites and Commensals in: A monograph of the existing Crinoids. vol. 1 Comatulids. Bul. U. S. Nat. Mus. no. **52** [1921] pp. 613–680.

71.—Colosi, G. Euphausiacea e Mysidacea raccolti dalla R. Nave "Vettor Pisani" nel 1882–1885. Ann. Mus. Zool. Univ. Napoli **5** no. 7 1924 pp. 1–7 9 figs.

72.—Colosi, G. Potamonidés africains du Muséum de Stockholm. Ark. Zool. Stockholm **16** 1924 No. 1 pp. 1–24 1 pl. 16 figs.

73.—Colosi, G. Crostacei raccolti nella Somalia della Missione della R. Società geografica (1924). Boll. Mus. Zool. Anat. comp. Univ. Torino **39** no. 32 1924 pp. 1–4.

74.—Colosi, G. A proposito di *Heteroglyphaea paronae* Colosi (Decapodo fossile). Boll. Soc. Nat. Napoli **35** 1924 pp. 141–142.

75.—Colosi, G. Alcune specie discusse di Misidacei. Boll. Soc. Nat. Napoli **35** 1924 pp. 191–195.

76.—Colosi, G. Una specie fossile di Gerionide (Decapodi brachiuri). Boll. Soc. Nat. Napoli **35** 1924 pp. 248–255 2 figs.

77.—Cornwall, I. E. Some littoral Barnacles from William Head, British Columbia. Canad. Field. Nat. Ottawa **38** 1924 pp. 41–43 fig.

78.—Daday de Dées, E. Crustacea in: Fauna Regni Hungariae. Ed. R. Soc. Sci. Nat. Hung. pp. 1–11 Budapest 1918 8vo. [Magyar and Latin.]

79.—Danini, E. S. Ueber den morphologischen Bestand des Bindegewebes von Crustaceen. Bul. Inst. Rech. Biol. Perm **3** 1924 pp. 169–180 1 pl. [Russian with German rés.]

80.—Decksbach, N. K. Zur Verbreitung und Biologie der Apusiden in Russland. Russ. Hydrobiol. Zeits. Saratow **3** 1924 pp. 143–155 2 maps. [German with Russian rés.]

81.—Dehorne, L. Rémarques sur l'ephippie des Cladocères. I.—*Daphnia longispina.* C.R. Acad. Sci. Paris **178** 1924 pp. 2278–2281.

82.—Delachaux, T. Zur Kenntnis der Copepodenfauna von Surinam. II. Harpacticiden. Zool. Anz. Leipzig **59** 1924 pp. 1–16 9 figs.

83.—Derjovin, A. N. Fresh water Peracarida from the coast of the Black Sea and Caucasus. Russ. Hydrobiol. Zeits. Saratow **3** 1924 pp. 113–129 1 pl. [Russian with English rés.]

84.—Dershavin, A. N. Bemerkung über Crustacea Malacostraca der unteren Petschora. Russ. Hydrobiol. Zeits. Saratow **2** 1923 pp. 111–151.

85.—Dershavin, A. N. Malacostraca der Süsswasser-Gewässer vom Kamtschatka. Russ. Hydrobiol. Zeits. Saratow **2** 1923 pp. 180–194 8 pls. [Russian, English diagn. German rés.]

86.—Despax, R. Remarques sur la biologie d'un Crustacé Phyllopode, *Chirocephalus stagnalis* Shaw. C.R. Soc. Biol. Paris **90** pp. 34–35.

87.—Dodds, G. S. Notes on Entomostraca from Colorado. The Shantz collection from the Pikes Peak Region. Proc. U. S. Nat. Mus. Washington **65** art. 18 1924 pp. 1–7.

88.—Dollfus, R. P. Contribution à la faune des Invertébrés du banc de Rockall. Bul. Inst. Ocean. Monaco no. **438** pp. 1–28 [Crust. pp. 23–24].

89.—Dorogostajskij, V. Contributions à la faune des Crustacés du fleuve Angara. Ann. Mus. Zool. Petrograd **21** 1916 pp. 302–322 1 pl.

90.—Dudich, E. Eine für Ungarn neue Amphipoden.-Art. Ann. Hist. Nat. Mus. Nat. Hung. Budapest **21** 1924 p. 244.

91.—Dudich, E. Ueber *Protelsonia hungarica* Méhely. Zool. Anz. Leipzig **60** 1924 pp. 151–155 [see also **Méhely**].

92.—Duval, M. Relation entre la concentration moléculaire du sang des Crustacés et celle du milieu extérieur. C.R. Acad. Sci. Paris **178** 1924 pp. 1754–1757.

93.—Duval, M. Sur la teneur en chlorure de sodium du sang de quelques invertébrés marins. C.R. Acad. Sci. Paris **179** 1924 pp. 706–708.

94.—Ekman, S. Süsswasserkrustaceen aus Nowaja Semlja in: Report Sci. Res. Norwegian Exped. Novaya Zemlya 1921 vol. i no. 10 pp. 1–16 11 figs. Kristiania 1923 8vo.

95.—Esterly, C. O. The Free-swimming Copepoda of San Francisco Bay. Univ. Cal. Publ. Zool. Berkeley **26** 1924 pp. 81–86 16 figs.

96.—Fadeew, N. N. Marine Elemente in der Fauna des Severny-Donetzbassin. Russ. Hydrobiol. Zeits. Saratow **2** 1923 pp. 240–246. [Russian with German rés.]

97.—Fage, L. Sur un type nouveau de Mysidacé des eaux souterraines de l'ile de Zanzibar. C.R. Acad. Sci Paris **178** 1924 pp. 2127–2129.

98.—Fasten, N. Comparative stages in the spermatogenesis of various *Cancer* Crabs. J. Morph. Philadelphia **39** 1924 pp. 47–61 3 pls.

99.—Filipčenko, J. A. Variabilité pendant la segmentation des oeufs du crabe *Maja verrucosa*. Bul. Acad. Sci. Russ. Petrograd (6) **14** 1920 pp. 357–366. [In Russian.]

100.—Fox, H. M. The migration of a Red Sea Crab through the Suez Canal. Nature London **113** 1924 pp. 714–715.

101.—Früchtl, F. Beitrag zur Kenntnis der qualitativen und quantitativen Verbreitung nordadriatischer Planktoncopepoden und ihrer Epibionten. SitzBer. Akad. Wiss. Wien Abt. I **132** 1924 pp. 195–223 20 figs.

102.—Fruchtl, F. Notizen über die Variabilität nord-adriatischer Planktoncopepoden. Verh. Zool. Bot. Ges. Wien **73** 1924 pp. 135–157 9 figs.

103.—Gagern, E. Beiträge zur Kopepodenkunde Deutschlands. Zool. Anz. Leipzig **60** 1924 pp. 334–336 3 figs.

104.—Gajl, K. Ueber zwei faunistische Typen aus der Umgebung von Warschau auf Grund von Untersuchungen an Phyllopoda und Copepoda (escl. Harpacticidae). Bul. Intern. Acad. Pol. Cracovie **1924 B** pp. 13–55.

105.—Galant, J. S. Der Schwanzreflex des Flusskrebses, *Astacus fluviatilis*. Seine Auslösungsweise und Eigentümlichkeiten. Zool. Anz. Leipzig **59** 1924 pp. 109–112.

106.—Galdiano, M. F. Una nueva especie del género *Atyaephira*. Bol. soc. Esp. Hist. Nat. Madrid **24** 1924 pp. 210–213 4 figs.

107.—Galdiano, M. F. Algunos Malacostráceos de Marruecos. Bol. Soc. Esp. Hist. Nat. Madrid **24** 1924 pp. 391–392.

108.—Gauthier, H. Recherches sur le développement larvaire d'*Atyaëphyra desmaresti* (Millet, 1832). (Décapodes-Atyidés). Bul. soc. hist. nat. Alger **15** 1924 pp. 337–376 11 pls.

109.—Ghigi, A. Ancora sulla sistematica delle specie mediterranee del genere *Triops*. Atti soc. ital. sci. nat. Milano **63** 1924 pp. 193–202 2 figs.

110.—Gianferrari, L. Die Acartien der deutschen Tiefsee-Expedition. Arb. Zool. Inst. Univ. Innsbruck **1** 1923 pp. 75–87 3 figs.

111.—Gill, E. L. Fossil Arthropods from the Tyne coalfield. Geol. Mag. London **61** 1924 pp. 455–471 7 figs.

112.—Glaessner, M. Über eine neue miozäne Krabbe und die Brachyurenfauna des Wiener Beckens. Verh. geolog. Bundesanstalt Wien for **1924** pp. 109–118 2 figs.

113.—Glauert, L. Contributions to the fauna of Western Australia, no. 4. A Fresh-water Isopod, *Phreatoicus palustris* n. sp. J. R. Soc. W. Austral. Perth **10** 1924 pp. 49–57 6 figs.

114.—Glauert, L. Contributions to the fauna of Western Australia no. 5. Crustacea. J. R. Soc. W. Austral. Perth **10** 1924 pp. 59–64.

115.—Gravier, C. Sur l'habitat du *Flabellicola neapolitana* Gravier (Copépode parasite). Bul. Muséum Paris **1923** pp. 503–505.

116.—Gravier, C. Sur un Crustacé parasite (*Flabellicola neapolitana* Gravier) et sur sa fréquence chéz un Annélide Polychète [*Flabelligera* (*Siphonostoma*) *diplochaitos* (Otto)]. Bul. Muséum Paris **1923** pp. 560–562.

117.—Gravier, C. Sur l'évolution d'un Crustacé parasite (*Flabellicola neapolitana* Gravier). C.R. Acad. Sci. Paris **178** 1924 pp. 163–168 5 figs.

118.—Greene, C. W. The circulatory system of the Brine Shrimp. Science New York **60** 1924 pp. 411–412.

119.—Grochmalicki, J. Beiträge zur Kenntnis der Süsswasserfauna Javas. Phyllopoda, Copepoda und Ostracoda. Bul. Intern. Acad. Krakow **1915 B** pp. 217–242 pls. vi–vii.

120.—Gurney, R. Crustacea. Pt. ix Decapod Larvae: in British Antarctic ("Terra Nova") Expedition, 1910. Zoology vol. viii no. 2. Pp. 37–202 78 text-figs. London (Trustees Bt. Mus.) 1924 4to.

121.—Gurney, R. Some notes on the genus *Apus* (Crustacea Branchiopoda). Ann. Mag. N. H. London (9) **14** 1924 pp. 559–568 2 figs.

122.—Gurney, R. The zoea of *Eurynome aspera.* J. Mar. Biol. Assoc. Plymouth **13** 1924 pp. 433–436 2 figs.

123.—Gurney, R. The larval development of some British Prawns (Palaemonidae). — i. *Palaemonetes varians.* Proc. Zool. Soc. London **1924** pp. 297–328 11 text-figs. II. *Leander longirostris* and *Leander squilla.* T.c. pp. 961–982 12 figs.

124.—Hale, H. M. Notes on Australian Crustacea. No. i. Family Squillidae. Rec. S. Austral. Mus. Adelaide **2** 1924 pp. 491–502 2 pls. 4 text-figs.

125.—Hale, H. M. Notes on Australian Crustacea, no. ii pp. 2–6 2 pls.; no. iii pp. 209–225 10 figs. Trans. R. Soc. S. Austr. Adelaide **48** 1924.

126.—Hale, H. M. The Flora and Fauna of Nuyts Archipelago and the Investigator Group. No. 16.—The Crustacea. Trans. R. Soc. S. Austr. Adelaide **48** pp. 67–73 2 pls. 2 text-figs.

127.—Hankó, B. Eine neue Amphipoden-Art aus Ungarn. Ann. Hist. Nat. Mus. Nat. Hung. Budapest **21** 1924 pp. 61–66 8 figs.

128.—Hanström, B. Untersuchungen über das Gehirn, insbesondere die Sehganglien der Crustaceen. Ark. Zool. Stockholm **16** no. 10 1924 pp. 1–119 44 figs.

129.—Hanström, B. Beitrag zur Kenntnis des zentralen Nervensystems der Ostracoden und Copepoden. Zool. Anz. Leipzig **61** 1924 pp. 31–38 3 figs.

Harant, H. *vide* Chatton.

130.—Harvey, E. N. Studies in Bioluminescence. XVI. What determines the colour of the light of luminous animals [Ostracods]. Amer. J. Physiol. Baltimore **70** 1924 pp. 619–623.

131.—Harvey, E. N. Studies in Bioluminescence. VII.—Reversibility of the photogenic reaction in *Cypridina,* pp. 133–145. IX.—Chemical nature of *Cypridina* luciferines and *Cypridina* luciferase pp. 269–293. J. Gen. Physiol. New York **1** 1919.

132.—Haughton, S. H. The fauna and stratigraphy of the Stormberg Series. Ann. S. Afr. Mus. Cape Town **12** 1924 pp. 323–497 55 text-figs.

133.—Heath, H. The external developement of certain Phyllopods. J. Morph. Philadelphia **38** 1924 pp. 453–483 5 pls.

134.—Heberer, G. Die Spermatogenese der Copepoden. I. Die Spermatogenese der Centropagiden nebst Anhang über die Oogenese von *Diaptomus castor.* Zs. wiss. zool. Leipzig **123** 1924 pp. 555–646 3 pls. 10 text-figs.

135.—Hedström, H. Om *Leperditia phaseolus* (His.) från Visbytrakten. Geol. För. Förh. Stockholm **45** 1923 pp. 335–336 2 figs.

136.—Hemmingsen, A. M. The blood sugar of some Invertebrates (*Astacus*). Skand. Ark. Physiol. Leipzig **45** 1924 pp. 204–210.

137.—Hemmingsen, A. M. Blood sugar regulation in the Crayfish. Skand. Arch. Physiol. Leipzig **46** 1924 pp. 51–56.

138.—Henry, M. A monograph of the fresh-water Entomostraca of New South Wales. Proc. Linn. Soc. N. S. Wales Sydney **49** 1924 pp. 120–137 5 pls.

139.—Henry, M. Entomostraca collected in the vicinity of Auckland, New Zealand. Proc. Linn. Soc. N.S.W. Sydney **49** 1924 pp. 313–318.

140.—Henry, M. Notes on breeding Entomostraca from dried mud and their habits in aquaria. Proc. Linn. Soc. N.S.W. Sydney **49** 1924 pp. 319–323.

141.—Herold, W. Einige Daten über Wachstum, Gestaltveränderung und Lebensalter von *Oniscus asellus* (Sars, 1899). Zool. Anz. Leipzig **60** 1924 pp. 197–201.

142.—Hirschmann, N. Ostracodes, collectionnés par MM. N. M. Knipovitsch et S. A. Pavlovitsch dans la mer Baltique en été 1908. Ann. Mus. Zool. Petrograd **20** 1915 pp. 569–597 27 figs. map. [In Russian.]

143.—Holmes, S. J. The genus *Cambarus* in California. Science New York **60** 1924 p. 358.

144.—Humperdinck, I. Ueber Muskulatur und Endoskelett von *Polyphemus pediculus* de Geer. Topographisches und Embryologisches. Zs. wiss. zool. Leipzig **121** 1924 pp. 621–655 2 pls. 16 text-figs.

145.—Hungerford, H. B. A new subterranean Isopod from Kansas. *Caecidotea tridentata.* Sci. Bul. Univ. Kansas Lawrence **14** 1922 pp. 175–178 1 pl.

146.—Huss, H. En motståndskraftig *Branchippus.* Fauna och Flora. Stockholm **1924** pp. 279–281.

147.—Huxley, J. S. The variation in the width of the abdomen in immature Fiddler Crabs considered in relation to their relative growth-rate. Amer. Nat. New York **58** 1924 pp. 468–475.

148.—Huxley, J. S. Constant differential growth-ratios and their significance. Nature London **114** 1924 pp. 895–896.

149.—Hyman, O. W. Studies on larvae of Crabs of the family Pinnotheridae. Proc. U. S. Nat. Mus. Washington **64** Art. 7 1924 pp. 1–7 6 pls.

150.—Hyman, O. W. Studies on larvae of crabs of the family Grapsidae. Proc. U. S. Nat. Mus. Washington **65** art. 10 1924 pp. 1–8 3 pls.

151.—Jackson, H. G. A new Terrestrial Isopod from Zululand. J. Linn. Soc. Zool. London **26** 1924 pp. 25–27 2 pls.

152.—Jancke, O. Die Brutpflege einigen Malakostraken. Zool. Anz. Leipzig **58** 1924 pp. 273–278 4 figs.

153.—Jermakoff, N. W. Zur Frage über die Veränderung des Auges bei *Simocephalus vetulus* unter dem Einfluss von Dunkelheit und Hunger. Arb. Biol. Wolga Station Saratow No. 4–5 1924 pp. 151–173 6 figs. [Russian with German rés.]

154.—Jespersen, P. Dr. Thorield Wulff's Plankton-Collections in the waters west of Greenland. Metazoa: in Den II Thule Ekspedition til Grølands Nordkyst 1916–18 no. **4** 1923 pp. 103–160 map. [Crust. 110–135.]

Jespersen, P. *vide* Adler.

155.—Johansen, F. Further notes on Canadian Euphyllopods. Canad. Field-Nat. Ottawa **38** 1924 pp. 1–8 3 figs.

156.—Johnson, G. E. Giant nerve fibers in Crustaceans with special reference to *Cambarus* and *Palaeomonetes.* J. Comp. Neur. Philadelphia **36** 1924 pp. 323–373 45 figs.

157.—Jorgensen, O. Crustacea in plankton investigations 1921–22 and 1922–23. Rep. Dove Mar. Lab. Cullercoats **12** 1923 pp. 112–133 1 pl.; **13** 1924 pp. 68–102.

158.—Kanda, S. Physicochemical studies on bioluminescence. V.—The physical and chemical nature of the luciferine of *Cypridina hilgendorfii.* Amer. J. Physiol. Baltimore **68** 1924 pp. 435–443.

159.—Karsinkin, G. S. Le plancton de l'angle du Sud-Ouest de la Mer d'Aral. Russ. Hydrobiol. Zeits. Saratow **3** 1924 pp. 24–32. [Russian, French rés.]

160.—Keiser, F. Zum Vorkommen von *Limnadia lenticularis* (L.) in der Schweiz. Zool. Anz. Leipzig **61** 1924 pp. 38–39.

161.—Kemp, S. Zoological results of the Percy Sladen Trust expedition to Yunnan under the leadership of J. W. Gregory, F.R.S. (1922). Decapod Crustacea. J. Proc. Asiat. Soc. Beng. Calcutta **19** 1924 pp. 437–445 1 pl. 2 text-figs.

162.—Kemp, S. Crustacea Decapoda of the Siju Cave, Garo hills, Assam. Rec. Ind. Mus. Calcutta **26** 1924 pp. 41–48 1 pl.

163.—Kiefer, F. Zur Kenntnis der *languidus*-ähnlichen Cyclopiden: *Cyclops languidus* Sars var *intermedia* nov. nom. Zool. Anz. Leipzig **58** 1924 pp. 278–283.

164.—Kiefer, F. Beiträge zur Copepodenkunde. Zool. Anz. Leipzig **59** 1924 pp. 200–204 8 figs.

165.—Kiefer, F. Eine neue Harpacticidenform des Süsswassers: *Canthocamptus cuspidatoides* nov. spec. Zool. Anz. Leipzig **59** 1924 pp. 304–307 6 figs.

166.—Kiefer, F. Beiträge zur Copepodenkunde. Zool. Anz. Leipzig **61** 1924 pp. 218–221 3 figs.

167.—Kiefer, F. Copepoden aus Bulgarien. Zool. Anz. Leipzig **61** 1924 pp. 297–302 3 figs.

168.—Klie, W. Beitrag zur Kenntniss der Süsswasserostracoden Russlands. Arb. Biol. Wolga-Station Saratow **7** No. 1–2 1923 pp. 58–67 4 figs.

169.—Klie, —. Ueber das Vorkommen von *Viguierella coeca* in einem Hallenschwimmbad. Arch. Hydrob. Stuttgart **15** 1924 pp. 122–124.

170.—Klie, W. Zur Kenntnis von *Cypris bispinosa* Lucas. Zool. Anz. Leipzig **60** 1924 pp. 324–327 3 figs.

171.—Klugh, A. B. A new *Cyclocypris* from eastern Canada. Trans. Canad. Inst. Toronto **14** 1923 pp. 337–342 1 pl.

172.—Kohli, G. R. Brachyura of the Karachi coast. Proc. Lahore Phil. Soc. **3** pp. 81–85.

173.—Kollmann, M. Remarques sur l'oeil médian et l'organe frontal des Phyllopodes Branchiopodes. Bul. Soc. zool. Paris **49** 1924 pp. 381–389 7 fig.

174.—Kollmann, M. Fonction glandulaire dans l'oeil impair des Phyllopodes. C.R. Soc. Biol. Paris **91** 1924 pp. 153–155.

175.—Korschelt, E. Ueber Lebensdauer und Altern bei Copepoden und Ostracoden. Sitzb. Ges. Natw. Marburg for **1920** 1921 pp. 67–75.

176.—Kowalski, J. Description d'une nouvelle espèce de Crabe fossile provenant des Nouvelles-Hébrides. Bul. soc. sci. nat. Nantes (4) **3** 1923 pp. 13–24 1 pl.

177.—Krmpotić, I. Beitrag zur Kenntnis der Entomostraken und Rotatorien, insbesonders der Diaptomiden Kroatiens und Slavoniens. Arch. Hydrob. Stuttgart **15** 1924 pp. 5–69 4 pls.

178. Kunkel, B. W. The Arthrostraca of Connecticut. Bul. Conn. State Geol. N. H. Surv. Hartford no. **26** 1918 1–261 84 figs.

179.—Kunze, G. Helgoländer Meeresalgen und die Assel *Idothea.* Ein Beitrag zur Frage nach den Schutzmitteln der Pflanzen gegen Tierfrass. Wiss. Meeresunters. Kiel Abt. Helgoland **14** 1923 pp. 189–196.

180.—Labbé, A. L'allélogenése chez les Metazoaires et les Protozoaires. C.R. Acad. Sci. Paris **178** 1924 pp. 132–133.

181.—Labbé, A. L'allélogenése chez *Canthocamptus minutus* O. F. Müll. et la formule sétale. C.R. Acad. Sci. Paris **178** 1924 pp. 594–596.

182.—Labbé, A. Sur de curieux organes sensitifs des allomorphes ♂ d'*Eurytemora velox* Brady. C.R. Acad. Sci. Paris **178** 1924 pp. 1576–1578.

183.—Labbé, A. Une lignée phylogénétique expérimentale. C.R. Acad. Sci. Paris **179** 1924 pp. 928–929.

184.—Lebour, M. V. The Euphausiidae in the neighbourhood of Plymouth and their importance as Herring food. J. Mar. Biol. Soc. Plymouth **13** 1924 pp. 402–420 6 pls.

185.—Legendre, R. Une invasion de *Polybius henslowi* Leach dans la Baie de Concarneau. Bul. Soc. Zool. Paris **49** 1924 pp. 364–369 ; also C. **Perez** t.c. pp. 369–370.

186.—Léger, L. Une nouvelle Écrevisse dans les eaux françaises. C.R. Acad. Sci. Paris **179** 1924 pp. 1205–1207.

187.—Legueux, M. L. Caractère sexuel temporaire chez *Gammarus duebenii* Lilj (Crustacé amphipode). C.R. Acad. Sci. Paris **178** 1924 pp. 659–661 fig.

188.—Leigh-Sharpe, W. H. and **Perkins, M. G. L.** Some parasitic Copepoda from Iceland. With an account of *Peniculus clavatus,* the conjunctive tubes of *Chondracanthus nodosus* and the males of *Clavella dubia.* Parasitology Cambridge **16** 1924 pp. 289–295 8 figs.

189.—Lévy, R. Sur la constatation de différences d'ordre physico-chimique entre le sérum des Crabes Sacculinés et celui des Crabes normaux. Bul. Soc. Zool. Paris **49** 1924 pp. 333–336.

190.—Litynski, A. Litauische Cladoceren. Bul. Intern. Acad. Sci. Krakow **1915** B 1916 pp. 248–259 pl. ix.

191.—Litynski, A. Über den Bau der Extremitäten bei den Cladoceren und deren Bedeutung für das System. Bul. Intern. Acad. Krakow **1916 B** pp. 3–30 1 pl.

192.—Litynski, A. Die Tatra-Seen und ihre Cladocerenfauna. Spraw. Kom. fizyogr. Krakow **51** 1917 pp. 1–87 2 photos. [Polish with German rés.].

193.—Lohmander, H. *Trichoniscoides sacroeensis* **n. sp.** Ent. Tidsk. Stockholm **45** 1924 pp. 80–82 1 fig.

194.—Longnecker, M. The Terrestrial Isopods of Iowa. Proc. Iowa Acad. Sci. Des Moines **30** [1924] pp. 197–199.

Lorenzis, P. de *vide* Bottazzi.

Maerker, W. *vide* Auerbach.

195.—Maki, M. and **Tsuchiya,** H. A monograph of the Decapod Crustacea of Formosa. Dept. Agr. Govt. Research Inst. Taihoku Formosa Rep. **3** 1923 pp. 1–195 14 pls. [Wholly in Japanese.]

196.—Malaczynska, S. Untersuchungen über den Bau und die Entwicklung der Hautdrüsen des Flusskrebses. Bul. Intern. Acad. Krakow **1917 B** pp. 147–181 2 pls.

197.—Man, J. G. de. On a collection of Macrurous Decapod Crustacea, chiefly Penaeidae and Alpheidae from the Indian Archipelago. Arch. Natg. Berlin **90** Abt. A Hft. 2 1924 pp. 1–60 64 figs.

198.—Marsh, C. D. A synopsis of the species of *Boeckella* and *Pseudoboeckella*, with a key to the genera of the Fresh-water Centropagidae. Proc. U. S. Nat. Mus. Washington **64** art. 8 1924 pp. 1–28 35 figs.

199.—Marsh, C. D. A new locality for a species of *Diaptomus*. Science New York **59** 1924 pp. 485–486.

200.—Marshall, S. The food of *Calanus finmarchicus* during 1923. J. Mar. Biol. Assoc. Plymouth **13** 1924 pp. 473–479 1 fig.

201.—Martynov, A. Sur les crustacés relictes du bassin du cours inférieur du Don. C.R. Acad. Russ. Petrograd **1922 A** pp. 13–14.

202.—Martynov, A. B. On some interesting Malacostraca from fresh waters of European Russia. Russ. Hydrobiol. Zeits. Saratow **3** 1924 pp. 210–216. [Russian with English rés.]

203.—Meek, A. Plankton investigations 1921–22. Rep. Dove Mar. Lab. Cullercoats **12** 1923 pp. 68–150 maps pls. figs.; also 1922–23 ibid **13** 1924 pp. 50–115.

204.—Meek, A. Experimental legislation with reference to the Crab fisheries of the east coast of Britain. Trans. Nat. Hist. Soc. Newcastle **6** 1924 pp. 63–79 6 charts.

205.—Méhely, L. v. *Protelsonia hungarica* nov. gen. n. sp. Ein blinder Isopode aus Ungarn. Zool. Anz. Leipzig **58** 1924 pp. 353–357.

205a.—Menozzi, C. Mirmecofili raccolti a Sambiase di Calabria. Boll. Soc. Ent. Ital. Genova **55** 1923 pp. 72-73.

206.—Menzel, R. Beiträge zur Kenntnis der Mikrofauna von Niederländisch-Ostindien. IV. Zum Vorkommen der Harpacticidengenera *Parastenocaris* und *Epactophanes* auf Sumatra. V. Moosbewohnende Ostracoden aus dem Urwald von Tjibodas. Treubia Batavia **3** 1923 pp. 189–196 11 + 5 figs.

206a.—Menzel, R. Zum supraterranen Auftreten der Gattung *Viguiella* Maupas (Harpacticidae) in Malayischen Archipel. Zool. Anz. Leipzig **59** 1924 pp. 69–72.

207.—Merrett, E. A. Fossil Ostracoda and their use in stratigraphical research. Geol. Mag. London **61** 1924 pp. 228–238.

208.—Miller, R. C. Wood-boring Crustacea from Hawaii and Samoa. Univ. Cal. Publ. Zool. **26** 1924 pp. 159–164 2 pls.

Milner, D. F. *vide* Nicholls.

209.—Minkiewicz, S. Neue und wenig bekannte Crustaceen aus den Tatraseen. Bul. Intern. Acad. Krakow **1916 B** pp. 56–70 2 pls.

210.—Minkiewicz, S. Die Crustaceen der Tatraseen: eine physiographisch-faunistische Skizze. Bul. Intern. Ac. Krakow **1916 B** 1917 pp. 262–278 1 pl.

211. Minkiewicz, S. Contribution à l'étude de la faune polonaise de Copépodes de la famille des Harpacticidae: *Wolterstorffia confluens* Schmeil. Bul. Intern. Acad. Pol. Cracovie **1922 B** 1923 pp. 173–181 1 pl.

212.—Misuri, A. Revisione delle specie mediterranee del genere *Pisa*. Arch. Zool. Ital. Napoli **8** 1916 pp. 249–258 2 pls.

213.—Monod, T. On a new species of Fresh-water Amphipod, *Carinogammarus annandalei* sp. n. from Algeria. Ann. Mag. N. H. London (9) **14** 1924 pp. 233–240 5 figs.

214. Monod, T. Prodrome d'une faune des Tanaidacea et des Isopoda (Excl. Epicaridea) des côtes de France (Excl. Mediterranée). Ann. soc. sci. nat. La Rochelle **37** fasc. 4 1923 pp. 19–124 + i–viii.

215.—Monod, T. Isopoda in: Parasitologia Mauritanica. Matériaux pour la faune parasitologique en Mauritanie. Pp. 67–84 many figs. Bul. Com. Etud. hist. sci. Afr. Occident. Franç. 1924.

216.—Monod, T. Sur quelques Asellides nouveaux des eaux douces de l'Afrique du Nord. Bul. soc. hist. nat. Alger **15** 1924 pp. 327–336 7 pls.

217.—Monod, T. Note sur la morphologie et la distribution géographique de *Meinertia collaris* Schiødte et Meinert. Bull. Soc. Zool. Paris **49** 1924 pp. 31–34.

218.—Monod, T. Sur un type nouveau de Malacostracé: *Thermosbaena mirabilis*, nov. gen. nov. sp. Bul. Soc. Zool. Paris **49** 1924 pp. 58–68 2 figs.

219.—Monod, T. Sur un *Petrochirus* de la côte occidentale d'Afrique. Bul. Soc. Zool. Paris **49** 1924 pp. 297–304 fig. 1.

220.—Monod, T. Sur la biologie de l'*Uca tangieri* Eydoux. Rev. Gen. Sci. Paris **34** 1924 p. 133.

221.—Monod, T. On a few Isopods from Ceylon. Spolia Zeylan. **13** 1924 pp. 97–101 2 pls.

222.—Morgan, T. H. The artificial induction of symmetrical claws in male Fiddler Crabs. Amer. Nat. New York **58** 1924 pp. 289–295 2 figs.

223.—Müller, G. W. Süsswasserostracoden der Deutschen Südpolar-Expedition 1901–1903. Nachtrag, in: Deutsche Sudpölar Expedition. Zool. **8** 1914 pp. 67–68 1 pl. 2 text figs.

224.—Naumann, E. Spezielle Untersuchungen über die Ernährungsbiologie des tierischen Limnoplanktons. 2. Ueber den Nahrungserwerb und die natürliche Nahrung der Copepoden und der Rotiferen des Limnoplanktons. Act. Univ. Lund (2) **19** No. 6 1923 pp. 1–17.

225.—Naumann, E. Notizen zur Ernährungsbiologie der limnischen Fauna. Ark. Zool. Stockholm **16** no. 12 1924 pp. 1–14.

226.—Naumann, E. Untersuchungen über einige gallertführende Tiere des Limnoplanktons. [*Holopedium.*] Ark. Zool. Stockholm **16** no. 24 1924 pp. 1–12.

227.—Naumann, E. Untersuchungen über das Verteilungsproblem des limnischen Biosestons. ii. Sind die Cladoceren des Heleoplanktons chemotaktisch. Ark. Zool. Stockholm **16** 1924 no. 25 pp. 1–17; iii.—Welche Faktoren bedingen die normale "Schwebestellung" der Entomostraceen des Limnoplanktons? t.c. no. 26 pp. 1–14.

228.—Nicholls, G. E. *Phreatoicus lintoni* a new species of freshwater Isopod from South-western Australia. J. R. Soc. W. Austral. Perth **10** 1924 pp. 91–104 2 pls. 1 text-fig.

229.—Nicholls, G. E. *Neoniphargus branchialis*, a new freshwater Amphipod from South-western Australia. J. R. Soc. W. Austral. Perth **10** 1924 pp. 105–111 2 pls.

230.—Nicholls, G. E. and **Milner,** D. F. A new genus of freshwater Isopoda allied to *Phreatoicus*. J. R. Soc. W. Austr. Perth **10** 1924 pp. 23–34 4 pls. 2 text figs.

231.—Nusbaum-Hilarowicz, J. Zur Histologie und Physiologie der Verdauungsorgane der Landasseln; zugleich ein Beitrag zur Kenntnis der Resorptions-vorgänge im Tierreich. Bul. Intern. Acad. Krakov **1920 B** 1921 pp. 67–117 2 pls.

232.—Obermayer, H. Beiträge zur Kenntnis der Litoralfauna des Vierwaldstättersees. Rev. Hydrob. Aarau **2** 1922 pp. 3–105. [Crust. pp. 42–56.]

Owen, D. *vide* Speyer.

233.—Ozawa, Y. and **Toru,** W. On two new species of *Estheria* from the Mezozoic shale of Korea. Japan J. Geol. Geogr. **2** 1923 pp. 40–42 2 figs.

234.—Panning, A. Isopoda: in Beitr. zur Kenntnis Land und Süsswasserfauna Deutsch-Südwestafrikas **2** Lief 3 1924 pp. 171–201 11 figs.

235.—Panning, A. Die Statocyste von *Astacus fluviatilis* (*Potamobius astacus* Leach) und ihre Beziehungen zu dem sie umgebenden Gewebe. Zs. wiss. Zool. Leipzig **123** 1924 pp. 305–358. 20 text-figs.

236.—Parker, G. H. The growth of marine animals on submerged metals. Biol. Bul. Wood's Hole Mass. **47** 1924 pp. 127–142 5 pls.

237.—Pasquini, P. Le comportement du plancton dans les étangs à macération des environs de Bologne (Italie) et l'influence de la macération sur les organismes. Ann. Biol. Lacustre Bruxelles **13** 1924 pp. 69–73.

238.—Pasquini, P. Per una maggiore conoscenza della fauna pelagica del Lago Trasimeno. Atti Acc. Lincei Roma **33** 2° sem. 1924 pp. 56–61.

239.—Pérez, C. Sur la spécificité du parasitisme des *Hemioniscus*. Bul. Soc. Zool. Paris **48** 1924 pp. 375–376.

Perez, C. *vide* Legendre.

240.—Perkins, M. Two abnormal chelae of *Carcinus moenas* Pennant. Ann. Mag. N. H. London (9) **14** pp. 136–138 figs.

Perkins, M. G. L. *vide* Leigh-Sharpe.

241.—Pesta, O. Hydrobiologische Studien über Ostalpenseen. Arch. Hydrobiol. Stuttgart Suppl. Bd. **3** 1924 pp. 385–596 map 19 figs. [Cladocera and Copepoda pp. 435–586.]

242.—Pilsbry, H. A. Miocene and Pleistocene Cirripedia from Haiti. Proc. U. S. Nat. Mus. Washington **65** 1924 art. 2 pp. 1–3 1 pl.

243.—Pisek, A. Verbreitung des Copepodengenus *Pleuromamma* Giesbr. nach Ergebnissen der Plankton-Expedition. Arb. Zool. Inst. Univ. Innsbruck **1** 1923 pp. 19–32 1 pl.

244.—Porter, C. E. Materiales para la fauna carcinologica de Chile. Rev. Chilena Santiago **25** 1923 pp. 420–425 1 pl. 1 text fig.

245.—Poulsen, C. Bornholms *Olenuslag* og deres Fauna. Com. Paleont. Mus. Min. Geol. Univ. Copenhague no. **20** 1923 pp. 1–83 3 pls. [With English rés.]

246.—Poulsen, E. M. Islandske Ferskvandsentomostraker En økologisk, dyregeografisk Undersøgelse. Videns. Medd. nat. For. Kjöbenhavn **78** [1924] pp. 81–141 map. [Danish with English rés.]

247.—Prenant, M. *Hemioniscus balani* Buchholz, parasite accidentel de *Chthamalus stellatus* Ranz. Bul. Soc. Zool. Paris **48** 1924 pp. 374–375.

248.—Pruvost, P. Description d'un Crustacé syncaride nouveau (*Palaeocaris Van-der-Grachti* nov. sp.) de l'assise de Chokier a Woensdrecht (Pays-Bas). Ann. Soc. Sci. Bruxelles **42** 1922 Comm. pp. 147–150 1 fig.

249.—Pütter, A. Die Ernährung der Copepoden. Arch. Hydrob. Stuttgart **15** 1924 pp. 70–117.

250.—Racovitza, E. G. Diagnoses des genres *Asellus* et *Stenasellus* et description de deux *Stenasellus* nouveaux. Bul. Soc. Stiinte Cluj **2** 1924 pp. 81–92 14 figs.

251.—Ramult, M. Untersuchungen über die Entwicklungsbedingungen der Sommereier von *Daphnia pulex* und anderen Cladoceren. Bul. Intern. Acad. Sci. Krakow **1914 B** pp. 481–514 13 figs.

252.—Rathbun, M. J. Brachyura, Albuneidae and Porcellanidae: in Results of Dr. E. Mjöberg's Swedish Scientific Expeditions to Australia 1910–1913. Ark. Zool. Stockholm **16** no. 23 1924 pp. 1–33 1 pl. 7 text-figs.

253.—Rathbun, M. J. Brachyuran Crabs collected in Curaçao. Bijdr. Dierk. Amsterdam **23** 1924 pp. 13–22 1 pl.

254.—Rathbun, M. J. New species of Crabs from Samoa. Proc. Biol. Soc. Washington **37** 1924 pp. 127–128.

255.—Rathbun, M. J. Expedition of the California Academy of Sciences to the Gulf of California in 1921. Crustacea (Brachyura). Proc. Cal. Acad. Sci. San Francisco (4) **13** 1924 pp. 373–379.

256.—Rathbun, M. J. Brachyuran Crabs collected by the Williams Galapagos Expedition, 1923. Zoologica New York **5** 1924 pp. 153–159 1 pl. 1 text-fig.

257.—Reinsch, F. K. Die Entomostrakenfauna in ihrer Beziehung zur Makroflora der Teiche. Arch. Hydrob. Stüttgart **15** 1924 pp. 253–279.

258.—Ringel, M. Zur Morphologie des Vorderdarmes (Schlund und Magen) von *Astacus fluviatilis* (*Potamobius astacus*) L. Zs. wiss. Zool. Leipzig **123** 1924 pp. 498–554 24 figs.

259.—Rose, E. Kurze Bemerkung zur Niphargiden-Systematik und dringende Bitte um Süsswasser-Amphipoden-Material. Arch. Hydrob. Stuttgart **15** 1924 pp. 136–138.

260.—Rose, M. Recherches biologiques sur le Plankton. Bul. Inst. Ocean. Monaco no. **439** 1924 pp. 1–16 11 figs.

261.—Rose, M. Notes faunistiques sur les Copépodes pélagiques des côtes de France. Bul. Soc. Zool. Paris **49** 1924 pp. 328–332.

262.—Roux, J. Crustacés d'eau douce de l'archipel Indo-Australien. Capita Zool. 's Gravenhage **2** 1923 pt. 2 pp. 1–22 2 figs.

263.—Roy, J. Sur un Harpacticide muscicole : *Maraenobiotus vejdovskyi* Mrazek var. *tenuispina* mihi. Bul. Soc. Zool. Paris **49** 1924 pp. 36–44 12 figs.

264.—Roy, J. Sur un nouvel Harpacticide muscicole : *Canthocamptus gauthieri* nov. sp. Bul. Soc. Zool. Paris **49** 1924 pp. 461–468 18 figs.

265.—Ruedemann, R. An ancestral Acorn Barnacle. New York State Mus. Bul. Albany no. **251** 1924 pp. 93–99 2 pls. 1 text fig.

Ruedemann, R. *vide* Withers.

266.—Rühe, F. E. Die Süsswassercrustaceen der Deutschen Südpolar Expedition 1901–1903 mit Ausschluss der Ostracoden in : Deutsche Südpolar Exped. Zool. **8** 1914 pp. 4–66 21 figs.

267.—Rylov, V. Une forme nouvelle de *Diaptomus* de l'Amérique du Nord (Entomostraca Copepoda) provenant de Sibérie orientale. Rev. russ entom. Petrograd **18** 1922 pp. 1–7 1 fig. [Russian.]

268.—Rylov, W. M. Ueber zwei wenig bekannte *Heterocope*-Arten (Copepoda, Calanoida). Zool. Anz. Leipzig **59** 1924 pp. 225–232 11 figs.

269.—Sars, G. O. The Freshwater Entomostraca of the Cape Province (Union of South Africa). Part ii. Ostracoda. Ann. S. Afr. Mus. Cape Town **20** 1924 pp. 105–193 19 pls.

270.—Sars, G. O. Contributions to a knowledge of the Fauna of South-West Africa. 1.—Crustacea Entomostraca, Ostracoda. Ann. S. Afr. Mus. Cape Town **20** 1924 pp. 195–212 5 pls.

271.—Schäferna, K. Amphipoda balcanica. Mém. Soc. Roy. Sci. Bohème Prague for **1921–1922** 1923 no. XII pp. 1–111 2 pls. [Bohemian with English summary.]

272.—Schellenberg, A. Neue Notodelphyiden des Berliner und Hamburger Museums mit einer Uebersicht der ascidienbewohnenden Gattungen und Arten. Mitt. Zool. Mus. Berlin **10** 1922 pp. 217–274 43 figs. Pt. II t.c. pp. 277–298 12 text-figs.

Schmalz, J. *vide* Auerbach.

273.—Schmidt, C. Die Phyllopoden und Copepoden des Obinger- und Seeoner-Sees. Arch. Hydrob. Stuttgart **15** 1924 pp. 179–208 map 37 figs.

274.—Schmitt, W. L. The Macruran, Anomuran and Stomatopod Crustacea. [Fauna van Curaçao.] Bijdr. Dierk. Amsterdam **23** 1924 pp. 61–81 1 pl. 7 text-figs.

275.—Schmitt, W. L. Expedition of the California Academy of Sciences to the Gulf of California in 1921. Crustacea (Macrura and Anomura). Proc. Cal. Acad. Sci. San Francisco (4) **13** 1924 pp. 381–388.

276.—Schmitt, W. L. Report on the Macrura, Anomura and Stomatopoda collected by the Barbados-Antigua Expedition from the University of Iowa in 1918. Univ. Iowa Studies **10** 1924 pp. 65–99 5 pls.

277.—Schmitt, W. L. The Macrura and Anomura collected by the Williams Galapagos Expedition, 1923. Zoologica New York **5** 1924 pp. 161–171 3 figs.

278.—Schnakenbeck, W. Chinesische Krabben in der Unterelbe. Naturwiss. Berlin **12** 1924 pp. 204–207 1 fig. ; see also T. **Monod** Rev. Gen. Sci. **35** 1924 p. 227.

279.—Schreitmüller, W. Krustaceen : in Beiträge zur Fauna Nord- und Nordostfrankreichs etct. Arch. Naturg. Berlin **89A** Hft. 12 1924 pp. 182–183 3 figs.

280.—Sciacchitano, I. Sulla rigenerazione della "furca" nell'*Artemia salina* L. delle Saline di Cagliari. Natura Milano **14** 1923 pp. 118–123 1 fig.

281.—Seltman, J. A rare Crustacean found at Cholesbury (*Chirocephalus*). Trans. Hert. Nat. Hist. Soc. St. Albans **17** 1923 pp. 293–294.

282.—Semenkewitsch, I. N. Ueber die Wasserasseln des Baikalsees. Russ. Hydrobiol. Zeits. Saratow **3** 1924 pp. 8–13 [Russian with Latin diag. German rés.].

283.—Sewell, R. B. S. Fauna of the Chilka Lake. Crustacea Copepoda. Mem. Ind. Mus. Calcutta **5** 1924 pp. 771–851 16 pls.

284.—Sexton, E. W. The moulting and growth-stages of *Gammarus*, with descriptions of the normals and intersexes of *G. chevreuxi*. J. Mar. Biol. Assoc. Plymouth **13** 1924 pp. 340–401 21 pls. 4 text-figs.

285.—Shackell, L. F. The toxicities of Coal Tar Creosote, Creosote Distillates and individual constituents for the Marine Wood Borer *Limnoria lignorum*. Bull. U. S. Fish. Comm. Washington **39** 1923 pp. 221–230.

286.—Simm, K. *Diaptomus alluaudi* De Guerne et Rich. eine für Galizien neue Crustacea-Art. Spraw. Kom. fizyogr. Krakow **50** 1916 pp. 177–179. [Polish with German rés.]

287.—Sollaud, E. Ce qu'il faut penser du polymorphisme poecilogoniquè du *Palaemonetes varians* (Leach). C.R. Acad. Sci. Paris **178** 1924 pp. 125–128.

288.—Spandl, H. Cladoceren fliessender Gewässer. Arch. Hydrob. Stuttgart **15** 1924 pp. 227–236.

289.—Spandl, H. Beobachtungen an Gammariden. Verh. Natf. Ver. Brünn **58** 1923 pp. 67–72.

290.—Spandl, H. Die Entomostrakenfauna der Schwarza nächt Brünn. Verh. Natf. Ver. Brünn **58** 1923 pp. 97–102.

291.—Spandl, H. Amphipoda Hyperiidea aus der Adria. Zool. Anz. Leipzig **58** 1924 pp. 261–272 2 figs.

292.—Spandl, H. Das Amphipoden-Genus *Gallea* (Walker). Zool. Anz. Leipzig **61** 1924 pp. 243–246 2 figs.

293.—Speyer, E. R. and **Owen,** O. The action of some organic compounds upon the Cucumber-house Woodlouse. Ann. Applied Biol. Cambridge **11** 1924 pp. 236–243.

Stasi, G. *vide* Bottazzi.

294.—Stebbing, T. R. R. South African Crustacea (Part xii of S. A. Crustacea, for the Marine Investigations in South Africa). Ann. S. Afr. Mus. Cape Town **19** 1924 pp. 235–248 7 pls.

295.—Stephensen, K. Crustacea Malacostraca v. (Amphipoda 1): in Danish Ingolf-Expedition **3** pt. 8 1923 pp. 1–100 22 text-figs.

296.—Stephensen, K. Hyperiidea-Amphipoda (part 2: Paraphronimidae, Hyperiidae, Dairellidae, Phronimidae, Anchylomeridae) in: Report on the Danish Oceanographical Expeditions 1908–10, to the Mediterranean and adjacent Seas. Vol. II Biology pt. D 4 1924 pp. 73–149 20 figs. and 15 charts.

297.—Stephensen, K. Revideret Fortegnelse over Danmarks Arter af Amphipoda. Revised catalogue of the Danish Amphipoda. Part 1: Hyperiidea, Gammaridea, Lysianassidae. (Danish.) Videns. Medd. nat. For. Kjøbenhavn **76** 1923 pp. 5–20; also Publ. Univ. Zool. Mus. Kjøbenhavn no. **28** 1923.

Stephensen, K. *vide* Ussing.

298.—Steuer, A. Bausteine zu einer Monographie der Copepodengattung *Acartia*. Arb. Zool. Inst. Univ. Innsbruck **1** 1923 pp. 89–146 11 pls. 179 text-figs.

299.—Stolley, E. Ueber einige Krebsreste aus schweizerischem und norddeutschem Neokom. Eclogae Geol. Helvet. Bâle **18** 1924 pp. 411–429 1 pl. 1 text-fig.

300.—Storch, O. Morphologie und Physiologie des Fangapparates der Daphniden. Nebst vergleichenden Betrachtungen über den Fangapparat der Cladoceren und Euphyllopoden. Ergebn. Zool. Jena **6** 1924 pp. 125–234 22 figs.

301.—Straelen, V. van. Sur *Pseudoglyphaea* et *Scapheus*, Crustacés décapodes du Lias. Bul. Acad. roy. Bruxelles (5) **10** 1924 pp. 219–228 4 figs.

302.—Straelen, V. van. Sur un Amphipode des terrains pétrolifères de Pechelbroun (Alsace). Bul. Acad. roy. Bruxelles (5) **10** 1924 pp. 325–331 1 fig.

303.—Straelen, V. van. Les Mysidacés du Callovien de la Voulte-sur-Rhône (Ardèche). Bul. Soc. Géol. Paris (4) **23** 1924 pp. 431–439.

304.—Tattersall, W. M. Crustacea Euphausiacea : in British Antarctic ("Terra Nova") Expedition 1910. Zoology vol. viii no. 1 pp. 1–36 2 pls. London (Trustees Bt. Mus.) 1924 4to.

305.—Tattersall, W. M. Zoological results of the Percy Sladen Trust expedition to Yunnan, under the leadership of J. W. Gregory, F.R.S. (1922). Amphipod Crustacea. J. Proc. Asiat. Soc. Beng. Calcutta **19** 1924 pp. 429–435 14 figs.

306.—Tettoni, W. Crostacei pliocenici dell'Appennino Modenese. Atti Soc. Nat. Mat. Modena **53-4** 1924 pp. 160–162.

Toru, W. *vide* Ozawa.

307.—Treillard, M. Sur l'élevage en culture pure d'un Crustacé Cladocère : *Daphnia magna*. C.R. Acad. sci. Paris **179** 1924 pp. 1090–1092.

Tsuchiya, H. *vide* Maki.

308.—Turner, C. L. A new field method of investigating the hydrotropisms of fresh-water invertebrates. Biol. Bul. Wood's Hole Mass. **46** 1924 pp. 35–54 7 pls.

309.—Turner, C. L. Studies on the secondary sexual characters of Crayfishes. 1. Male secondary sexual characters in females of *Cambarus propinquus*. Biol. Bul. Wood's Hole Mass. **46** 1924 pp. 263–273 2 pls.

310.—Ulrich, E. O. and **Bassler,** R. S. Ostracoda : in Maryland Geol. Surv. Silurian. Baltimore 1923 pp. 701–704 pl. 63.

311.—Ussing, H. og **Stephensen,** K. *Corophium bonelli* (M.-Edw. ?) G. O. Sars, ny for Danmark, med Noter om andre *Corophium*-Arter. Videns. Medd. nat. hist. For. Kjøbenhavn **78** 1924 pp. 69–79 3 figs. [Danish with English rés.]

312.—Utermöhl, H. Ein Mutualismus (Symbiose ?) zwischen subterranen Copepoden und Schwefelbakterien. Biol. Zentralb. Leipzig **44** pp. 58–66 ; see also W. **Ziegelmayer** pp. 254–257.

313.—Vallentin, R. Copepoda : in Boyson V. F. The Falkland Islands, pp. 341–344. Oxford (Clarendon Press) 1924 8vo.

314.—Vandel, A. Description d'une nouvelle espèce d'Isopode terrestre : *Trichoniscus* (*Oritoniscus*) *despaxi* n. sp. Bul. Soc. Zool. Paris **49** 1924 pp. 91–101 7 figs.

315.—Vandel, A. Un Cloporte [*Hemilepistus reaumuri*] qui se creuse un terrier. Bul. Soc. Zool. Paris **49** 1924 pp. 469–471.

316.—Vandel, A. Le déterminisme du développement des oostégites des Isopodes et les caractères sexuels secondaires temporaires des Crustacés. C.R. Acad. Sci. Paris **178** 1924 pp. 974–976.

317.—Vandel, A. La spanandrie (disette de mâles) géographique chez un Crustacé Branchiopode : *Lepidurus apus* (L.). C.R. Acad. Sci. Paris **178** 1924 pp. 1759–1761.

318.—Van Name, W. C. Isopods from the Williams Galapagos Expedition. Zoologica New York **5** 1924 pp. 181–210 12 pls.

319.—Verne, J. Note histochemique sur le métabolisme du glycogène pendant la mue chez les Crustacés. C.R. Soc. Biol. Paris **90** 1924 pp. 186–188.

320.—Vialli, M. Ricerche sulla pressione osmotica. 1–11. Nei crostacei terrestri e d'acqua dolce. Rend. Ist. lomb. Milano **56** 1923 pp. 850–854.

321.—Volterra, L. La vàriabilita delle Dafnie pelagiche nei laghi di Albano e di Nemi : *Daphnia cucullata*. pp. 131–136 ; *Daphnia longispina* pp. 197–201. Atti Acc. Lincei Roma **33** 2° sem. 1924.

322.—Werner, F. Variationsanalytische Untersuchungen an Chydoriden. Versuch einer quantitativen Morphologie der Cladoceren-Schale. Zs. Morph. Ökol. Berlin **2** 1924 pp. 58–188 27 figs.

323.—White, G. M. Reactions of the larvae of the Shrimp *Palaemonetes vulgaris* and the Squid, *Loligo pealii* to monochromatic light. Biol. Bul. Wood's Hole Mass. **47** 1924 pp. 265–273 4 figs.

324.—Willer, A. Untersuchungen zur Kenntnis der Ernährungsphysiologie von *Gammarus pulex* L. Schr. physik. Ges. Königsberg **63** 1922 pp. 60–96.

325.—Wilson, C. B. New North American Parasitic Copepods, new hosts and notes on Copepod literature. Proc. U. S. Nat. Mus. Washington **64** art. 17 1924 pp. 1–22 3 pls.

326.—Wilson, C. B. Parasitic Copepods from the Williams Galapagos Expedition. Zoologica New York **5** 1924 pp. 211–217 16 figs.

327.—Withers, T. H. Some Cretaceous and Tertiary Decapod Crustaceans from Jamaica. Ann. Mag. N. H. London (9) **13** 1924 pp. 81–93 pls. ii–iv.

328.—Withers, T. H. Eocene Brachyurous Decapod Crustaceans from Nigeria. Ann. Mag. N. H. London (9) **13** 1924 pp. 94–97.

329.—Withers, T. H. Some Decapod Crustaceans (*Callianassa* and *Ranina*) from the Oligocene of Washington State, U.S.A. Ann. Mag. N. H. London (9) **14** 1924 pp. 121–127 pl. iv.

330.—Withers, T. H. Decapod Crustacea from the Oligocene of Anguilla. Ann. Mag. N. H. London (9) **14** 1924 pp. 225–233 pl. vi.

331.—Withers, T. H. The phylogeny of the Cirripedia. Ann. Mag. N. H. London (9) **14** 1924 pp. 318–324 fig.; also **Ruedemann,** R. pp. 533–544 fig.

332.—Withers, T. H. An Australian Cretaceous Cirripede. J. R. Soc. West. Austral. Perth **9** 1923 pp. 64–66 1 pl.

333.—Withers, T. H. The fossil Cirripedes of New Zealand. Palaeont. Bul. Geol. Surv. N. Zeal. Wellington no. **10** 1924 pp. 1–47 8 pls. 1 map 8 text-figs.

334.—Woltereck, R. Beiträge zur Variationsanalyse tierischer starrer Formen. 1. Die Methode der "Raster-Analyse" bei Crustaceen. Intern. Rev. Hydrobiol. Leipzig **12** 1924 pp. 13–16.

335.—Woods, H. Note on *Pygocephalus* from the Upper Dwyka Shales of Kimberley. Trans. Geol. Soc. S. Afr. Johannesburg **25** 1923 pp. 41–42 1 pl.

336.—Yonge, C. M. Studies on the comparative physiology of digestion. II.—The mechanism of feeding, digestion and assimilation in *Nephrops norvegicus*. Brit. J. Exper. Biol. Edinburgh **1** 1924 pp. 343–389 18 figs.

337.—Zandt, F. Fischparasiten des Bodensees. Centralbl. Bakt. Jena Abt. I **92** 1924 pp. 225–271 [Copepoden p. 256] 33 figs.

Ziegelmayer, W. *vide* Utermöhl.

338.—Zimmermann, F. Die Fauna und Flora der Grenzteiche bei Eisgrub. II. Copepoda et Phyllopoda. Verh. Natf. Ver. Brünn **58** 1923 pp. 45–57 1 fig.

II.—SUBJECT INDEX.

GENERAL.

Nomenclature and Systematics.—Official list of generic names, ANON., **8**; Larval stages of Decapods, GURNEY, **120**; Species and varieties in Crustacea and Ants, ALPATOV, **4**.

Technique.—Breeding Entomostraca from dried mud, HENRY, **140**; Investigating tropisms, TURNER, **308**; Limnology investigations, WOLTERECK, **334**.

Biography.—A. Mrázek, BRAUNER, **39**.

Economics. — Destruction of the Woodlouse pest of Cucumber-houses, SPEYER & OWEN, **293**; Wood-borers, *Limoria* etct., MILLER, **208**; SHACKELL, **285**; Legislation for Crab-fishing, MEEK, **204**; Euphausids as Herring food, LEBOUR, **184**; *Polybius*, LEGENDRE, **185**.

STRUCTURE.

General.—*Lithodes*, BOAS, **32**; *Polyphemus*, HUMPERDINCK, **144**; Amphipods, CHILTON, **67**; Copepods, KEMPOTIÓ, **177**; Parasitic Copepods, LEIGH-SHARPE & PERKINS, **188**; CHATTON & HARANT, **63**; GRAVIER, **116**, **117**; Fossil Cirripeds, WITHERS, **333**.

External Anatomy and Glands.—Decapods, DE MAN, **197**; Amphipods, SEXTON, **284**; Isopods, NICHOLLS & MILNER, **230**; Copepods, LABBÉ, **181**; Cladocera, LITYNSKI, **191**; Antennal gland, SCHÄFERNA, **271**; Skin-Glands *Potamobius*, MALACZYNSKA, **196**.

Nervous system and sense organs.—Brain, HANSTRÖM, **128**; Nervous system, HANSTRÖM, **129**; Eye of Phyllopods, KOLLMAN, **173, 174**; Retinal pigment, BENNITT **30**; Sense organs, Copepods, LABBÉ, **182**; Of *Typhlocaris*, CAROLI, **57**; Statocysts, PANNING, **235**.

Other Organs. — Alimentary canal etct., BARNARD, **24**; RINGEL, **258**; YONGE, **336**; NUSBAUM-HILAROWICZ, **231**; Feeding apparatus, STORCH, **300**; Circulatory apparatus, GREENE, **118**; Organs of Reproduction, STENER, **298**.

Histology.—Connective tissue, DANINI, **79**; Nerve fibres, JOHNSTON, **156**.

PHYSIOLOGY.

General.—Retinal pigment, BENNITT, **30**; Glandular function of the median eye of Phyllopods, KOLLMANN, **174**; Reflex action in tail of *Astacus*, GALANT, **105**; Nutrition and Digestion, STORCH, **300**; NUSBAUM-HILAROWICZ, **231**; WILLER, **324**; YONGE, **336**; Rhythmic movements of intestine, TEN CATE, **58**; Glycogen metabolism and moult, VERNE, **319**; Circulatory system, *Artemia*, GREENE, **118**; Physics of the blood, DUVAL, **92**; Tetraploidism and genetics, ARTOM, **13**.

Chemical Physiology.—Sodium Chloride and blood, DUVAL, **93**; Blood-sugar in *Astacus*, HEMMINGSEN, **136, 137**; Serum of *Sacculina*, LEVY, **189**.

Experimental Physiology. — Injection experiments, CHAHOVITCH, **59**; Experiments on the eye of *Simocephalus*, JERMAKOFF, **153**; Asymmetry in the claws of Fiddler Crabs, MORGAN, **222**; Eggs of Copepods, LABBÉ, **183**.

Miscellaneous.—Laws of growth, HUXLEY, **147, 148**; Age and growth, HEROLD, **141**; Luminescense in Ostracods, AMBERSON, **6**; HARVEY, **130, 131**; KANDA, **158**; Osmotic pressure, VIALLI, **320**; Effects of poisons, BEKLEMISCHEW, **28**; Cause of red colour in *Diaptomus*, BLAAS, **31**.

DEVELOPMENT.

Embryology.—Skin-glands *Potamobius*, MALACZYNSKA, **196**; Muscles and endoskeleton, *Polyphemus*, HUMPERDINCK, **144**; Oostegites of Isopods, VANDEL, **316**.

Metamorphosis and Larval Stages.—Crabs, HYMAN, **149**; *Atyaephyra*, GAUTHIER, **108**; Decapods, GURNEY, **120, 122, 123**; Euphausids, LEBOUR, **184**; *Gammarus*, SEXTON, **284**; Ostracods, CANNON, **52**; Phyllopods, HEATH, **133**.

Sexual Organs.—Spermatogenesis *Cancer*, FASTEN, **98**; Spermatogenesis and Oogenesis, Copepods, HEBERER, **134**.

Miscellaneous. — Ephippial eggs, *Daphnia*, DEHORNE, **81**; Summer eggs, *Daphnia*, RAMULT, **251**; Experimental rearing, *Daphnia*, TREILLARD, **307**.

ETHOLOGY.

General Habits.—*Uca*, BOYCE, **36**; MONOD, **220**; Housing habits of Pagurids, BALSS, **19**; Shell forming habits Cladocera, NAUMANN, **226**; Food-habits, *Idothea*, KUNZE, **179**; Copepoda, NAUMANN, **224**; PÜTTER, **249**; MARSHALL, **200**; Ostracods, NAUMANN, **225**; Flotation factors, Limnoplankton, NAUMANN, **227**.

Pairing and Breeding habits.—Brooding arrangements, JANCKE, **152**.

Tropisms and influence of External Conditions.—Methods, TURNER, **308**; Monochromatic Light, WHITE, **323**; Mechanism of Phototropism, BUDDENBROCK, **49**; Phototropism in plankton, ROSE, **260**; Phototaxis, *Daphnia*, ALVERDES, **5**; Chemotaxis in Limnoplankton, NAUMANN, **227**; Influence of metal plates on growth, PARKER, **236**; Seasonal variation in plankton, ADLER & JESPERSEN, **1**; Influence of Flora on Entomostraca, REINSCH, **257**; Influence of salt water, APSTEIN, **9**; External conditions and *Chiridothea*, BRUNN, **48**; *Branchipus*, HUSS, **146**; Copepoda, LABBÉ, **180**; Variation of salinity, SEWELL, **283**; Hemp-water and Entomostraca, PASQUINI, **237**.

Ecology.—In Iceland, POULSEN, **246**.

Habitats.—Freshwater Lakes, AUERBACH & OTHERS, **14**; MINKIEWICZ, **209, 210**; OBERMAYER, **232**; PASQUINI, **238**; Hot-springs, BRUES, **47**; Subterraneous, FAGE, **97**; HUNGERFORD, **145**; Moss-inhabiting, MENZEL, **206**; Myrmecophilous, CHOPRA, **69**; Cavernicolous, BOLTAZZI, **34**; CAPRA, **53**; CAROLI, **56**; CHAPPUIS, **61**; CHOPRA, **68**; KEMP, **162**; Brackish, CHILTON, **65**; Marine Plankton, FRUCHTL, **101**; JESPERSEN, **154**; JORGENSEN, **157**.

Parasitism and Symbiosis.—Crustacea on Crinoids, CLARK, **70**; Symbiosis in Decapods, BALSS, **16**; in Pagurids, BALSS, **19**; Symbiosis Copepods and Bacteria, UTERMOHL, **312**; Parasitic habits, *Hemioniscus*, PRENANT, **247**; PÉREZ, **239**; Ascidicolous Parasitic Copepods, CHATTON & HARANT, **63**; *Flabellicola*, GRAVIER, **115**; Cirripeds, BROCH, **43**.

Migration.—Through Suez Canal, FOX, **100**.

Longevity.—In Entomostraca, KORSCHELT, **175**.

VARIATION AND AETIOLOGY.

Variation Macrura, ROUX, **262**; SOLLAUD, **287**; Macrura, FILIPCENKO, **99**; Copepoda, FRUCHTL, **102**; LABBÉ, **181**; Cladocera, VOLTERRA, **321**; WERNER, **322**; Dimorphism and new species, BOWKIEWICZ, **35**.

Sex Problems. — Intersexes, *Gammarus*, SEXTON, **284**; Sex-ratio, Branchiopods, VANDEL, **317**; Temporary sex-characters, *Gammarus*, LEGUEUX, **187**; Secondary sexual characters, *Cambarus*, TURNER, **309**; Isopods, VANDEL, **316**.

Teratology. — In *Jasus*, v. BONDE, **33**; *Cancer*, CALMAN, **51**; *Carcinus*, PERKINS, **240**; Tail regeneration, SCIACCHITANO, **280**.

Phylogeny.—Decapod larvae, GURNEY, **120**; Eryonidae, BALSS, **17**; *Lithodes*, BOAS, **32**; Cladoceran appendages, LITYNSKI, **191**; Parasitic Copepods, GRAVIER, **116, 117**; Cirripeds, RUEDEMANN, **265**; WITHERS, **331**.

DISTRIBUTION.

Land and Freshwater (including Salt Lakes.)

Palaearctic Region.

British Isles.—SALTMAN, **281**.

France.—LÉGER, **186**; SCHREITMÜLLER, **279**; VANDEL, **314**; ROY, **263**.

Belgium.—SCHREITMÜLLER, **279**.

Germany.—GAGERN, **103**; KIEFER, **164, 165, 169**; Bavaria, SCHMIDT, **273**.

Switzerland.—AUERBACH & OTHERS, **14**; CARL, **54**; KEISER, **160**; OBERMAYER, **232**; PESTA, **241**; ZANDT, **337**.

Austria.—SPANDL, **288, 289, 290**; PESTA, **241**; ZIMMERMANN, **338**.

Hungary. — DADAY DE DEÉS, **78**; DUDICH, **90**; HANKÓ, **127**; MÉHELY, **205**.

Poland.—GAJL, **104**; LITYNSKI, **192**; MINKIEWICZ, **209, 210, 211**; SIMM, **286**.

Sweden.—LOHMANDER, **193**.

Iceland.—POULSEN, **246**.

Russia.—BEHNING, **26, 27**; BEKLEMICHEW, **29**; BRONSTEIN, **46**; DECKSBACH, **80**; DERJAVIN, **83, 84**; KLIE, **168**; LITYNSKI, **190**; MARTYNOW, **201, 202**; Nowaya Zemlya, EKMAN, **94**.

Spain.—RACOVITZA, **250**.

Italy.—ARCANGELI, **10, 11**; BOTTAZZI & OTHERS, **34**; CAPRA, **53**; CAROLI, **56**; PASQUINI, **238**.

Balkan States.—SCHÄFERNA, **271**; CHAPPUIS, **61**; KRMPOTIĆ, **177**; KIEFER, **167**; RACOVITZA, **250**.

Algeria and Tunisia.—MONOD, **213, 216, 218**; ROY, **264**; BREHM, **41**; CHEVREUX & GAUTHIER, **64**.

Tripoli.—ARCANGELI, **12**.

Siberia.—ALPATOV, **3**; DOROGOSTAJSKIJ, **89**; RYLOW, **267**; Aral, KARSINKIN, **159**; L. Baikal, SEMENKEWITSCH, **282**; Kamchatka, DERSHAVIN, **85**.

Japan.—Balss, **16**.

Ethiopian Region.

Africa.—Colosi, 72.

South Africa.—South West African Protectorate, Barnard, 22; Panning, 234; Sars, 270; Cape Province, Müller, 223; Ruhe, 266; Sars, 269; Zululand, Jackson, 151.

East Africa.—Zanzibar, Fage, 97; Somaliland, Colosi, 73.

Kerguelen.—Ruhe, 266.

Indian Region.

India.—Chopra, 68, 69; Kemp, 162; Sewell, 283.

Ceylon.—Bär, 20.

China.—Burckhardt, 50; Yunnan, Kemp, 161; Tattersall, 305.

Java and Sumatra.—Brehm, 40; Grochmalicki, 119; Menzel, 206, 206a.

Aru Is.—Menzel, 206a.

Australian Region.

Molucca Isles.—Roux, 262.

New Guinea.—Chappuis, 62.

Australia.—Henry, 138; Nicholls, 228, 229; Nicholls & Milner, 230; Glauert, 113.

New Zealand.—Henry, 139; Brady, 38.

Neotropical Region.

Falkland Is.—Vallentin, 313.

Patagonia.—Chappuis, 62.

Chile.—Chilton, 66.

Surinam.—Delachaux, 82.

Galapagos Is.—Van Name, 318.

Nearctic Region.

United States.—California, Holmes, 143; Colorado, Dodds, 87; Marsh, 199; Kansas, Hungerford, 145; Iowa, Longnecker, 194; Connecticut, Kunkel, 178.

Canada.—Johansen, 155; Klugh, 171.

Alaska.—Marsh, 199.

Marine.

North Atlantic.—Broch, 45; Dollfus, 88; Gianferrari, 110; Gurney, 120; Pisek, 243; Stephensen, 295, 296; Tattersall, 304; Baltic, Bruun, 48; Hirschmann, 142; Danish coasts, Ussing & Stephensen, 311; Stephensen, 297; North Sea and Channel, Gagern, 103; Meek, 203; Jorgensen, 157; Chatton & Harant, 63; Rose, 261; Monod, 214; Schellenberg, 272; N.W. African coasts, Brian, 42; Monod, 215; Galdiano, 107; Broch, 43; Icelandic area, Poulsen, 246; Leigh-Sharpe & Perkins, 188.

Mediterranean.—Caroli, 55; Rose, 261; Chatton & Harant, 63; Monod, 214, 217; Galdiano, 106; Misuri, 212; Stephensen, 296; Adriatic, Fruchtl, 101, 102; Spandl, 291.

Tropical Atlantic. — Barney, 25; Carribean area, Balss, 18; Rathbun, 253, 256; Schmitt, 276; West African area, Broch, 44; Monod, 219; Schellenberg, 272.

Southern Ocean.—New Zealand area, Barney, 25; Brady, 37, 38; Chilton, 67; Gurney, 120; Schellenberg, 272; Tattersall, 304; South Australian area, Hale, 124, 125; Schellenburg, 272; Kerguelen area, Schellenberg, 272; South African area, Barnard, 21, 23; Boyce, 36; Spandl 292; Stebbing, 294; Schellenberg, 272; Magellanic area, Schellenberg, 272; Porter, 244.

North Pacific.—Japanese area, Balss, 16; Alaskan area, Cornwall, 77; Californian area, Esterly, 95; Rathbun, 255; Schmitt, 275.

Eastern Pacific.—Galapagos, Rathbun, 256; Schmitt, 277; Van Name, 318; Wilson, 326.

Indopacific Ocean.—General, Gianferrari, 110; Ceylon coast, Monod, 221; Malay area, Annandale, 7; de Man, 197; Schellenberg, 272; Formosa coasts, Maki & Tsuchiya, 195; West Australian coasts, Glauert, 114; Rathbun, 252; Polynesian area, Colosi, 71; Miller, 208; Rathbun, 254; Red Sea area, Schellenberg, 272; Karachi coast, Kohli, 172.

Arctic Ocean.—Arctic European area, ALPATOV, **2**; West Greenland coast, JESPERSEN, **154**.

Antarctic Ocean.—BARNEY, **25**; GURNEY, **120**; TATTERSALL, **304**.

Geological.

Cambrian.—Bornholm, POULSEN, **245**.

Ordovician. — New York State, RUEDEMANN, **265**.

Silurian.—Maryland, U.S.A., ULRICH & BASSLER, **310**.

Carboniferous. — Northumberland, GILL, **111**; Belgium, PRUVOST, **248**; Dwyka, S. Africa, WOODS, **335**.

Trias.—(Stormberg beds) S. Afr., HAUGHTON, **132**.

Rhaetic.—Korea, OZAWA & TORU, **233**.

Lias.—Europe, v. STRAELEN, **301**.

Jurassic.—France, v. STRAELEN, **303**.

Cretaceous.—Switzerland, STOLLEY, **299**; Pondoland S. Africa, CHAPMAN, **60**; W. Australia, WITHERS, **332**.

Eocene.—Nigeria, WITHERS, **328**; Jamaica, WITHERS, **327**.

Oligocene.—Alsace, v. STRAELEN, **302**; Washington State, WITHERS, **329**.

Miocene.—Austria, GLAESSNER, **112**; New Zealand, WITHERS, **333**; Haiti, PILSBRY, **242**.

Pliocene.—Italy, TETTONI, **306**; New Zealand, WITHERS, **333**.

Post-tertiary. — New Hebrides, KOWALSKI, **176**; Terra del Fuego, COLOSI, **76**.

III.—SYSTEMATIC INDEX.

List of Crustacean parasites of Crinoids pp. 623–640, CLARK **70**.

Sodium chloride in Crustacean blood, DUVAL **93**.

The Malacostraca of the Volga basin, BEHNING **26**.

Peracarids of the neighbourhood of Perm, BECKLEMICHEW **29**.

INCERTAE SEDIS.

†*Camptophyllia* **gen. n.** p. 466 for type *C. eltringhami* **sp. n.** p. 467 fig. 6, *C. fallax* **sp. n.** p. 469 fig. 7 both Carboniferous, Tyne, GILL Geol. Mag. **61**.

Thermosbaena see under Mysidacea p. 25.

DECAPODA.

Decapods of the Russian Arctic coasts, ALPATOV **2**.

A monograph of the Decapod Crustacea of Formosa with figures of most of the species [in Japanese], MAKI & TSUCHIYA **195**.

Decapods from the West Indies BALSS **18**.

Decapods and Stomatopods of the W. Indies, SCHMITT **276**.

Decapods of Curaçao W. I., SCHMITT **274**, RATHBUN **253**.

Decapod larvae obtained by the "Terra Nova" expedition in the Atlantic, New Zealand and Sub-Antarctic seas, with notes on distribution, classification, nomenclature of stages and the phylogenetic importance of the larvae, with 78 text-figs., GURNEY **120**.

Injection experiments with Decapods, CHAHOVITCH **59**.

Glycogen metabolism and moult in Decapods, VERNE **319**.

Brachyura.

Brachyura from N. W. Australia, RATHBUN **252**; From Curaçoa, RATHBUN **253**; Galapagos, RATHBUN, **256**; Gulf of California, RATHBUN **255**.

The composition of the serum of normal and parasitized Crabs, LEVY **189**.

OXYRHYNCHA.

The Oxyrhynchid Crabs of Japan, BALSS **16**.

Aegeon obsoletum taxonomic note p. 51, BALSS **16**.

Cyrtomaja horrida japonica **subsp. n.** Japanese seas, BALSS Arch. Natg. **90** A Hft. 5 p. 23.

Dasygius doederleini **sp. n.** Japanese Seas, BALSS Arch. Natg. **90** A Hft. 5 p. 49 1 fig.

Elamena unguiformis longirostris descript. figs. p. 70, HALE **126.**

Eurynome aspera the zoea described 2 figs., GURNEY **122.**—*E. reini* **sp. n.** Japanese seas, BALSS Arch. Natg. **90** A Hft. 5 p. 31.

Herbstia ortmanni **sp. n.** Japanese seas, BALSS Arch. Natg. **90** A Hft. 5 p. 33.

Hyastenus minimus **sp. n.** N. W. Australia, RATHBUN Ark. Zool. **16** no. 23 p. 4 fig. 1.

Maja verrucosa variation during segmentation, FILIPCENKO **99.**

Mimulus cristatus **sp. n.** Japanese seas, BALSS Arch. Natg. **90** A Hft. 5 p. 28.

Paranaxia **gen. n.** for type *Pisa serpulifera* Guérin, RATHBUN Ark. Zool. **16** no. 23 p. 6.

†*Parthenope* sp. Oligocene Anguilla fig. p. 232, WITHERS **330.**

Pisa review of the Mediterranean species, MISURI **212.**

Pleistacantha sancti-johannis remarks fig. p. 22, BALSS **16.**

Pseudomicippe tenuipes descript. fig., p. 35, BALSS **16.**

CYCLOMETOPA.

Review of the African species of Potamonidae, COLOSI **72.**

†Gen. et sp. ined. Eocene Nigeria, WITHERS Ann. Mag. N. H. (9) **13** p. 96 figs.

Actaea acies descript. figs. p. 17, RATHBUN **252.**

†*Callinectes jamaicensis* **sp. n.** Eocene Jamaica, WITHERS Ann. Mag. N. H. (9) **13** p. 87 figs.

Cancer pagurus with abnormal walking leg, CALMAN **51.**—*C. productus*, *C. oregonensis*, *C. gracilis* spermatogenesis, FASTEN **98.**

†*Carcineretes woolacotti* addt. descrip. p. 91 figs., WITHERS **327.**

Carcinus moenas laws of growth of abdomen and carapace, HUXLEY **148**; abnormal chelae fig., PERKINS **240.**

Charybdis (*Charybdis*) *jaubertensis* **sp. n.** N. W. Australia, RATHBUN Ark. Zool. **16** no. 23 p. 23 2 figs.

†*Etisus doucerei* **sp. n.** post-tertiary ? New Hebrides, KOWALSKI Bul. Soc. sci. nat. Nantes (4) **3** 1923 p. 13 figs.

†*Holcocarcinus sulcatus* **gen. et sp. n.** Eocene Nigeria, WITHERS Ann. Mag. N. H. (9) **13** p. 94 figs.

Melybia thalamita nr. St. Thomas W. I. p. 181 fig. 5, BALSS **18.**

Neptunus pelagicus migration through Suez Canal to Mediterranean, FOX **100.**

†*Panopeus* sp. Oligocene Anguilla fig. p. 231, WITHERS **330.**

Parathelphusa (*Barythelphusa*) *afzelii* Sierra Leone p. 19 fig. 14 and other African species figured and described, COLOSI Ark. Zool. Stockholm **16** no. 1.

Periclimenes rathbunae **sp. n.** Curaçao W. I., SCHMITT Bijdr. Dierk. **23** p. 70 figs.

Polybius henslowi distr. and habits and relation to Sardine fishery, LEGENDRE **185.**

Potamon (*Potomonautes*) *lindblomi* Kenya Colony p. 5 fig. 3, *P.* (*P.*) *odhneri* Limoru, E. Afr. p. 7 fig. 4; *P.* (*P.*) *valderi* French Congo p. 8 fig. 5; *P.* (*Geothelphusa*) *lovéni* Mt. Elgon p. 13 fig. 9; *P.* (*G.*) *granviki* Mt. Elgon p. 16 fig. 11 **spp. n.**, COLOSI Ark. Zool. Stockholm **16** no. 1 1924.—*P.* (*Potomonautes*) *bottegoi* in Somaliland p. 2, COLOSI **73.**—*P.* (*Potamiscus*) *yunnanense* **sp. n.**, KEMP J. Proc. Asiat. Soc. Beng. Calcutta **19** p. 442 pl. xviii.

†*Scylla costata* addt. descript. and fig. p. 229, WITHERS **330.**

†*Titanocarcinus edwardsii* **sp. n.** Pliocene nr. Modena, TETTONI Atti Soc. Nat. Mat. Modena **53–4** p. 162.

Xanthias vestitus descript. figs. p. 15, RATHBUN **253.**—*X. insculpta* at the Galapagos Is. descript. fig. p. 157, RATHBUN **256.**

†*Xanthilites rathbunae* **sp. n.** Eocene Jamaica, WITHERS Ann. Mag. N. H. (9) **13** p. 89 figs.

CATOMETOPA.

On the larval stages of Grapsid crabs especially the zoeas of *Sesarma*, *Planes* and *Pachygrapsus*, HYMAN **150.**

The zoea larvae of Pinnotherid Crabs, HYMAN **149.**

†*Archaeogeryon fuegianus* **sp. n.** Quaternary? Terra del Fuego, COLOSI Boll. Soc. Nat. Napoli **35** 1924 p. 251 2 figs.

Cleistostoma blephariskios **sp. n.** Delagoa Bay, STEBBING Ann. S. Afr. Mus. **19** p. 237 1 pl.

†*Coeloma laevis* **sp. n.** Pliocene nr. Modena, TETTONI Atti Soc. Nat. Mat. Modena **53–4** p. 161.

Eriocheir sinensis taken in the Lower Elbe, SCHNAKENBECK **278.**

Gelasimus experiments on the asymmetry of the claws, MORGAN **222**; Growth ratios, HUXLEY **147.**

†*Gonoplax meneghini* **sp. n.** Pliocene nr. Modena, TETTONI Atti Soc. Nat. Mat. Modena **53-4** p. 161.

Ilyoplax formosensis **sp. n.** Formosa RATHBUN in MAKI & TSUCHIYA **195.**

Libystes villosus **sp. n.** Samoa, RATHBUN Proc. Biol. Soc. **37** p. 127.

Macrophthalmus sandakani addt. descript. N. W. Australia 2 figs. p. 12, RATHBUN **252.**

†*Macrophthalmus vindobonensis* **sp. n.** Miocene Vienna basin, GLAESSNER Verh. Geol. Bundesanst. Wien for **1924** p. 110 2 figs.

Ocypoda gaudichaudii megalops from Galapagos described and figured p. 155, RATHBUN **256.**

Pinnixa vanderhorsti, P. arenicola descript. figs. p. 17, RATHBUN **253.**

Pinnotheres villosulus, P. cardii p. 14 figs., RATHBUN **252.**

Scopimera inflata descript. and figs. p .10, RATHBUN **252.**

Sesarma (*Parasesarma*) *obliquifrons* **sp. n.** Samoa, RATHBUN Proc. Biol. Soc. **37** p. 127.

Uca mjöbergi **sp. n.** N. W. Australia, RATHBUN Ark. Zool. **16** no. 23 p. 9 4 figs. *U. tangieri* habits on the shores of the Baie du Lévrier N. W. Afr., MONOD **220.**—*U. annulipes* in Durban Bay, field notes, BOYCE **36.**—*U. inversa* in Somaliland p. 3, COLOSI **73.**

†*Varuna* sp. Eocene Jamaica p. 90 fig., WITHERS **327.**

OXYSTOMATA.

†*Calappa carlei* **sp. n.** Oligocene Anguilla W. I., WITHERS Ann. Mg. N. H. (9) **14** p. 227 figs.

Hepatus chiliensis note and figure p. 424, PORTER **244.**

Leucosia pubescens in W. Australia p. 61, GLAUERT **114.**

Philyra angularis **sp. n.** N. W. Australia, RATHBUN Ark. Zool. **16** no. 23 p. 26 2 figs.

Platymera gaudichaudi in Chile p. 422 fig., PORTER **244.**

Randallia curaçaoensis descript. fig. p. 13, RATHBUN **253.**

†*Ranina americana* **sp. n.** Oligocene, Washington State, WITHERS Ann. Mag. N. H. (9) **14** p. 125 figs.

DROMIACEA.

†*Prosopon schneideri* **sp. n.** Cretaceous Switzerland, STOLLEY Eclog. Geol. Helvet. **18** p. 413 fig. 1.

Anomura.

The habits of Hermit-crabs and their symbiotic relations with animals of other groups, BALSS **19.**

Anomura of the Galapagos, SCHMITT **277**; of the Gulf of California, SCHMITT **275.**

GALATHEIDEA.

Petrolisthes gracilis and other species taxonomic and other notes p. 383, SCHMITT **275.**—*P. vanderhorsti* **sp. n.** Curaçao W. I., SCHMITT Bijdr. Dierk **23** p. 73 figs.

Pisosoma curaçaoensis **sp. n.** Curaçao W. I., SCHMITT Bijdr. Dierk. **23** p. 75 figs.

Polyonyx tuberculosus descript. fig. p. 31, RATHBUN **252.**

Porcellana suluensis descript. figs. p. 30, RATHBUN **252.**

PAGURIDEA.

Calcinus astathes **sp. n.** Delagoa Bay, STEBBING Ann. S. Afr. Mus. **19** p. 239 1 pl.

Cancellus makrothrix **sp. n.** Algoa Bay STEBBING Ann. S. Afr. Mus. **19** p. 240 1 pl.

Eupagurus placens Mossel Bay p. 241 1 pl., *E. deprofundis* Cape Morgan, nr. E. London p. 243 1 pl., STEBBING Ann. S. Afr. Mus. **19**.

Lithodes structure and relationships on Pagurid, BOAS **32**.

Petrochirus pustulatus at Dakar synonymy and descript. 1 fig., MONOD **219**.

HIPPIDEA.

[Vacant.]

Macrura.

Macrura of the Indian Archipelago DE MAN **197**; Of the Gulf of California, SCHMITT **275**; Of the Galapagos, SCHMITT **277**.

NEPHROPSIDEA.

Astacus blood sugar investigations, HEMMINGSEN **136 137**.—*A. fluviatilis* reflex action of the tail, GALANT **105**; Physiology of the intestine, TEN CATE **58**.

Cambarus, structure of giant nerve-fibres, JOHNSON **156**.—*C. affinis* taken in France, LÉGER **186**.—*C. clarkii* reported in California, HOLMES **143**.—*C. propinquus* male and female secondary characters in same individual, TURNER **309**.

†*Hoploparia dentata* redescribed and figured Cretaceous Switzerland p. 416, STOLLEY **299**.

Nephrops norvegicus anatomy and physiology of digestive and feeding organs, YONGE **336**.

Potamobius astacus anatomy of stomach and oesophagus, RINGEL **258**; Structure and development of skin-glands, MALACZYNSKA **196**; Structure of the statocyst, PANNING **235**.

ERYONIDEA.

On the relation of the fossil forms of *Eryon* (Trias to Cretaceous) to those now living, BALSS **17**.

LORICATA (SCYLLARIDEA).

†*Heteroglyphea* Col. = *Pseudoglyphea* pp. 226, 228, v. STRAELEN **301**.—*H. paronae* critical note, COLOSI **74**.

Jasus lalandii abnormalities and malformations, v. BONDE **33**.

†*Pseudoglyphea grandis*, *P. etalloni* descript. and figs. p. 220, v. STRAELEN **301**.

†*Scapheus ancylochelis* descript. and fig., p. 224, v. STRAELEN **301**.

Scyllarus tuberculatus descript. figs. p. 53, DE MAN **197**.

THALASSINIDEA.

Axianassidae **fam. n.** for genus *Axianassa* p. 77, SCHMITT **274**.

Axianassa intermedia **sp. n.** Curaçao W.I., SCHMITT Bijdr. Dierk. **23** p. 77 figs.

†*Callianassa trechmanni* p. 83 figs.—*C. subplana* p. 85 figs.—*C. gigantea* p. 86 figs., **spp. n.** Eocene Jamaica, WITHERS Ann. Mag. N.H. (9) **13**.—*C. clallamensis* **sp. n.** Oligocene, Washington State, WITHERS Ann. Mag. N.H. (9) **14** p. 122 figs.—*C. anguillensis* addt. descript. fig. p. 226, WITHERS **330**.

Gebiopsis hartmeyeri **sp. n.** St. Thomas W.I., BALSS Zool. Anz. Leipzig **61** p. 178.

Glypturus grandimanus note and figs. West Indies, BALSS **18**.

Upogebia (*Gebiopsis*) *operculata* **sp. n.** Okra reef W.I., SCHMITT Univ. Iowa Stud. **10** p. 91 4 figs.

CARIDEA.

Alpheus splendidus and other East Indian species addt. descript. and figs., pp. 41–51 figs. 14–16, DE MAN **197**.

Atyaëphyra desmaresti larval development 11 pls., GAUTHIER **108**.—*A. valentina* **sp. n.** nr. Valencia, Spain, GALDIANO Bol. Soc. Esp. N. H. **24** p. 210 4 figs.

Caridina gregoriana **sp. n.** Yunnan, KEMP J. Proc. Asiat. Soc. Beng. Calcutta **19** p. 437.

Crangon barbadensis p. 70 3 figs., *C. rathbunae* p. 74 10 figs., *C. verrilli* p. 77 4 figs., *C. nuttingi* p. 78 3 figs. Barbados **spp. n.**, SCHMITT Univ. Iowa Stud. **10**.

Hippolyte curaçaoensis **sp. n.** Curaçao W.I., SCHMITT Bijdr. Dierk. **23** p. 68 figs.—*H. williamsi* **sp. n.** Eden I. Galapagos, SCHMITT Zoologica **5** p. 163 fig. 40.

Leander longirostris, *L. squilla* larval development and post-larval growth, GURNEY **123**.—*L. beauforti* **sp. n.** Ceram, Moluccas, ROUX Capita Zool. 2 pt. 2 p. 18 figs.

Lysmata galapagensis Eden I. Galapagos SCHMITT Zoologica **5** p. 165 fig. 41.

Palaemon cavernicola **sp. n.** Siju Cave, Assam, KEMP Rec. Ind. Mus. **26** p. 42 pl. iii.—*P.* (*Eupalaemon*) *philippensis* in Waigeoe, variation, measurements etc. etc. and notes on other Moluccan Waigeoe species p. 5, ROUX **262**.

Palaemonetes structure of giant nerve-fibres, JOHNSON **156**.—*P. vulgaris* effect of monochromatic light on larva, WHITE **323**.—*P. varians* variations discussed, not mutational, SOLLAUD **287**; larval developement, GURNEY **123**.

Pandalus (*Parapandalus*) *leptorhynchus gibber* **var. n.** S. Australian Coasts, HALL Trans. R. Soc. S. Austr. **48** p. 68 2 figs.

Paratya annamensis **sp. n.** Annam, BALSS Arch. Natg. **90** A Hft. 5 p. 45.

Periclimenes antiguensis **sp. n.** Antigua SCHMITT Univ. Iowa Stud. **10** p. 84 15 figs.

Problemacaris spinetum addt. descript. fig. p. 244 2 pls, STEBBING **294**.

Processa jacobsoni addt. descript. and figs p. 32, DE MAN **197**.

Synalpheus sluiteri, *S. theophane*, addt. descript. and figs p. 35, DE MAN **197**. — *S. curaçaoensis* **sp. n.** Curaçao W.I., SCHMITT Bijdr. Dierk. **23** p. 66 figs.—*S. nobilii* at the Galapagos legs fig. p. 162, SCHMITT **277**.

Typhlocaris the statocysts in an Italian species, CAROLI **57**.—*T. salentina* **sp. n.** cave near Otranto, Italy, CAROLI Boll. soc. nat. Napoli **35** p. 265 also BOTTAZZI and others Riv. Biol. Roma **5** p. 307 figs.

PENAEIDEA.

Heteropenaeus longimanus fig. p. 30, DE MAN **197**.

Parapenacopsis sculptilis, *P. gracillima* descript. figs. p. 17, DE MAN **197**.

Penaeopsis monoceros and other East Indian species described and figured pp. 2–16 figs. 1–7, DE MAN **197**.—*P. smithi* **sp. n.** Curaçao W.I., SCHMITT, Bijdr. Dierk. **23** p. 62 figs.

STENOPIDEA.

[Vacant.]

EUPHAUSIACEA.

Euphausia longirostris larval stages from subantarctic seas described p. 22 11 figs. TATTERSALL **304**.

Nyctiphanes couchii larval stages and economic importance at Plymouth as herring food with notes on larval stages of other Euphausids, LEBOUR **184**.

Thysanopoda aequalis remarks 2 figs. p. 15, TATTERSALL **304**.

MYSIDACEA.

Arthromysis **gen. n.** p. 3 for *A. chierchiae* **sp. n.** p. 4 Magellan Strs., COLOSI Ann. Mus. Zool. Univ. Napoli **5** no. 7 p. 4 figs. 1–3.

Diamysis pengoi diagnosed and figs. 1–10 p. 117, DERJAVIN **83**.

†*Dollocaris* **gen. n.** p. 432 for *D. ingens* **sp. n.** p. 434 figs. Jurassic France, v. STRAELEN Bul. Soc. Géol. Paris **23**.

Doxomysis and *Lycomysis* controversial note, COLOSI **75**.

†*Kilianicaris* **gen. n.** for *K. lerichei* **sp. n.** Jurassic France, v. STRAELEN Bul. Soc. Géol. Paris **23** p. 434 figs.

Lepidophthalmus servatus **gen.** et **sp. n.** subterranean waters of Zanzibar, FAGE C.R. Acad. Sci. **178** p. 2128.

Mesomysis lacustris=*M. kovalevskyi* p. 116, DERJAVIN **83**.

Neomysis awatschensis description p. 181 pl. 27, DERSHAVIN **85**.—*N. meridionalis* p. 5 figs. 4–6 Chiloe Is., *N. monticelli* p. 6 figs. 7–9 Magellan Strs., **spp. n.**, COLOSI Ann. Mus. Zool. Univ. Napoli **5** 297.

Onychomysis mingrelica = *Limnomysis benedeni* p. 116, DERJAVIN **83.**

Potamomysis pengoi distr. in Russian rivers, MARTYNOV **202,** FADEEW **96.**

†*Pygocephalus* sp. from the Dwyka beds (? U. Carboniferous) of Kimberley S. Afr. 5 figs, WOODS **335.**

Thermosbaena mirabilis **gen.** et **sp. n.** of uncertain affinities probably in Mysidacea from hot spring at El Hamma Algeria, MONOD Bul. Soc. Zool. Paris **49** p. 58 2 figs.

SYNCARIDA.

†*Palaeocaris van-der-grachti* **sp. n.** Carboniferous Belgium, PRUVOST Ann. Soc. Sci. Bruxelles **42** p. 147 fig.

STOMATOPODA.

Gonodactylus oerstedii spinulosus **var. n.** Barbados, SCHMITT Univ. Iowa Stud. **10** p. 96 1 fig.—*G. œ.* var. *curaçaoensis* **var. n.** Curacao W.I., SCHMITT Bijdr. Dierk. **23** p. 80 figs.

Lysiosquilla perpasta p. 497 2 figs., *L. vercoi* p. 499 2 figs., **spp. n.,** *L. vercoi osculans* **var. n.** S. Australian Coasts, HALE Rec. S. Austral. Mus. **2.**

Squilla miles variation in the rostrum and other Australian species described, HALE **124.**

CUMACEA.

Lamprops korroensis **sp. n.** F. W. Kamchatka, DERSHAVIN Russ. Hydrob. Zs. **2** p. 182 pls. 2, 5.

TANAIDACEA.

The Tanaids of the coasts of France monographed with keys, etct., MONOD **214.**

Apseudes chilkensis **sp. n.** Chilka Lake India, CHILTON Mem. Ind. Mus **5.** p. 879 figs.

ISOPODA.

The Isopods of the coasts of France monographed with keys, etc., MONOD **214.**

Parasitic Isopods of the Baie de Lévrier nr. Cape Blanco N.W. Afr., MONOD **215.**

Isopods from Astroni, nr. Naples ARCANGELI **10** and of S. Italy in the Naples Museum, ARCANGELI **11.**

Ceylon Isopods, MONOD **221.**

The Isopods of Connecticut monographed, KUNKEL **178**; of Iowa, LONGNECKER **194.**

Anatomy of digestive canal of Isopods, BARNARD **24.**

The developement of the oostegites in Isopods and their independence of fecundation, VANDEL **316.**

ASELLOTA.

Asellus aquaticus brooding arrangements and other habits, JANCKE **152.**—*A. angarensis* in Lake Baikal, ALPATOV **3.**—*A. korotnewii* p. 10, *A. minutus* p. 11, *A. dybowskii* p. 12, **spp. n.,** Lake Baikal with note on other species in the Lake, SEMENKEWITSCH Russ. Hydrob. Zs. **3.**—*A. coxalis africanus* **subsp. n.** wells Tunisia p. 330 11 figs., *A. gauthieri* **sp. n.** springs Algeria p. 332 11 figs., *A. g. thermonyctophilus* **subsp. n.** hot springs Algeria p. 334 11 figs. MONOD Bul. soc. hist. nat. Alger **15.**

Caecidotea tridentata **sp. n.** Kansas, (subterranean), HUNGERFORD Sci. Bul. Univ. Kansas **14** p. 175 1 pl.

Johannella **gen. n.** p. 327 for *J. purpurea* **sp. n.** p. 328 hot springs Algeria, MONOD Bul. soc. hist. nat. Alger **15** p. 328 11 figs.

Protelsonia **gen. n.** for *P. hungarica* **sp. n.** Hungarian caves, MÉHELY Zool. Anz. **58** p. 353, further discussion, should stand as *Stenasellus hungaricus* (Méhely), DUDICH **91.**

Stenasellus car. emend. p. 84, *S. breuili* p. 86 3 figs. Spain, *S. gjorgjevici* p. 90 6 figs Serbia, **spp. n.,** RACOVITZA Bul. Soc. Stiinté **2.**

PHREATOICIDEA.

Hyperoedesipus **gen. n.** (near *Phreatoicus*) p. 23 for type *H. plumosus* **sp. n.** p. 24 freshwater W. Australia, NICHOLLS & MILNER J. R. Soc. W. Austr. **10** 4 pls. 2 textfigs.

Phreatoicus palustris **sp. n.** freshwater, W. Australia, GLAUERT J. R. Soc. W. Austr. **10** p. 51 6 figs.—*P. lintoni* **sp. n.** freshwater W. Australia, NICHOLLS J. R. Soc. W. Austral. **10** p. 93 2 pls. and text fig.

FLABELLIFERA.

Alcirona pearsoni **sp. n.** Ceylon coast, MONOD Spolia Zeylan. **13** p. 99 2 pls.

Apanthura sandalensis in Chilka Lake p. 881 fig. 2, CHILTON **65.**

Calathura borradailei in Chilka Lake p. 881 fig. 3, CHILTON **65.**

Cassidina pulchra **sp. n.** Chilka Lake India, CHILTON Mem. Ind. Mus. **5** p. 888 figs.

Cirolana mayana at Galapagos Is. descript. fig. p. 186, VAN NAME **318.**—*C. nigra* **sp. n.** Chilka Lake, India p. 884 figs., *C. pleonastica, C. parva* also at Chilka figs, CHILTON Mem. Ind. Mus. **5.**—*C. wood-jonesi* **sp. n.** S. Australian coasts, HALE Trans. R. Soc. S. Austr. **48** p. 71 figs.

Exosphaeroma parva **sp. n.** Chilka Lake India, CHILTON Mem. Ind. Mus. **5** p. 890 figs.

Gnathia mulieraria p. 3 11 figs., *G. pustulosa* p. 4, 4 figs. **spp. n.,** coasts S. Australia, HALE Trans. R. Soc. S. Austr. **48.**

Isocladus excavatus in W. Australia Characters p. 60, GLAUERT **114.**

Limnoria andrewsi in Samoa and Honolulu destruction to wood figs. 3, 5, MILLER **208.**—*L. lignorum* effects of creosote etc., on destruction of, SHACKELL **285.**

Livoneca sinuata 3 figs. p. 73, MONOD **215.**

Meinertia collaris africana p. 32 Algerian coasts, *M. c. globuligera* p. 33 figs. Moroccan coasts, **subspp. n.,** MONOD Bul. Soc. Zool. Paris **49.**—*M. italica* on coast N. W. Afr. p. 71 3 figs., MONOD **215.**—*M. gaudichaudii* at Galapagos Is. descript. figs. p. 187, VAN NAME **318.**

Nerochila cephalotes and *N. rhabdota* discussed and distinguished 7 figs p. 75, MONOD **215.**

Parabathynomus natalensis **gen.** et **sp. n.** Natal Coast, BARNARD Rep. Fish. Mar. Biol. Surv. Capetown no. **4** p. 2 1 pl.

Rocinela orientalis at Chilka Lake p. 886 fig. 7, CHILTON **65.**

VALVIFERA.

Chiridothea entomon distr. in the Baltic and influence of salinity, BRUUN **48.**

Euidotea stricta, E. bakeri descript. figs. p. 214, HALE **125.**

Glyptonotus entomon experiments with different grades of salt water, APSTEIN **9.**

Idothea, its feeding relation to Alga-growth round Heligoland, KUNZE **179.**

Neastacilla algenis **sp. n.** S. Australian coast, HALE Trans. R. Soc. S. Austral. **48** p. 212 figs.

Parastacilla **gen. n.** p. 209 for type, *P. truculenta* **sp. n.** p. 210 figs., also *P. bakeri* p. 211 **sp. n.** 2 figs. S. Australian waters, HALE Trans. R. Soc. S. Austr. **48.**

Pentidotea australis p. 220 fig. 8, *P. munda* p. 221 fig. 9, S. Australian coasts, HALE Trans. R. Soc. S. Austr. **48.**

Synidotea variegata in Chilka Lake p. 891 figs., CHILTON **65.**

Synischia **gen. n.** p. 218 for *S. levidensis* **sp. n.** p. 219 figs. S. Australian coast, HALE Trans. R. Soc. S. Austr. **48.**

Zenobiana phryganea **sp. n.** coasts S. Australia, HALE Trans. R. Soc. S. Austr. **48** p. 223 fig. 10.

EPICARIDEA.

Hemioniscus balani and its hosts, PERÉZ **239,** parasitizing *Chthamalus stellatus,* PRENANT **247.**

ONISCOIDEA.

Land Isopods of Libya (Tripoli) ARCANGELI **12.**

Terrestrial Isopods of S. W. Africa, BARNARD **22.**

Anatomy and physiology of the organs of nutrition in the Oniscidae, NUSBAUM-HILAROWICZ **231.**

Armadillidium speyeri useful destructive agents to this pest, SPEYER & OWEN **293.**

Cubaris granulatus mymecophilous habits p. 528, CHOPRA **69**.—*C. cavernosus* in Siju cave, Assam, CHOPRA **68**.—*C. ovampensis* **sp. n.** S. W. Africa, BARNARD Ann. S. Afr. Mus. **20** p. 232 fig. 1.—*C. secutor* **sp. n.** Zululand, JACKSON J. Linn. Soc. Zool. London **26** p. 25. 2 pls.—*C. beebei* **sp. n.** Galapagos p. 203 3 figs., also *C. galapagoensis* 5 figs., VAN NAME **318**.

Deto echinata variations and relations to *D. acinosa* and *D. armata* of St. Paul I. p. 185 figs. 4–10. PANNING **234**.

Diploexochus thomseni p. 177 fig. 2, *D. damarensis* p. 181 fig. 3, **spp. n.**, S. W. Afr. Protect. and note on *D. nanus*, PANNING Beitr. Kennt. D. Südwestafrikas **2**.

Haplophthalmus monticellii **sp. n.** S. Italy, ARCANGELI Ann. Mus. Zool. Univ. Napoli **5** no. 2 p. 5 fig.

Hemilepistus reaumuri burrowing habits in Algeria, VANDEL **315**.

Ligia exotica taxonomic note p. 894, CHILTON **65**.—*L. glabrata* in Damaraland, mouth parts and relations to other species p. 195 fig. 11, PANNING **234**.—*L. novaezelandiae* ranges to Chile and Juan Fernandez, CHILTON **66**.

Ligyda baudiniana Galapagos descript. 6 figs. p. 205, VAN NAME **318**.

Niambia flavescens p. 233 fig. 2, *N.*(?) *griseoflavus* p. 234 fig. 3, *N.* (?) *longicauda* p. 235 fig. 4, **spp. n.**, S.W. Africa, BARNARD Ann. S. Afr. Mus. **20**.

Oniscus asellus age and growth, HEROLD **141**.

Philoscia dobakholi **sp. n.** Siju Cave, Assam, CHOPRA Rec. Ind. Mus. **26** p. 54 2 figs.—*P. culebroides* p. 193 2 figs., *P. williamsi* p. 194 3 figs., *P. nomae* p. 196 3 figs. Galapagos VAN NAME Zoologica **5**.

Platyarthrus acropyga **sp. n.** mymecophilous on Barkuda I., India, CHOPRA Rec. Ind. Mus. **26** p. 524 5 figs.

Porcellio assamensis Siju Cave, Assam CHOPRA Rec. Ind. Mus. **26** p. 51 2 figs. —*P. hirtus* myrmecophilous habits in Calabria, MENOZZI, **205a**.

Rhyscotus bicolor **sp. n.** S. W. Africa, BARNARD Ann. S. Afr. Mus. **20** p. 235.—*R. laxus* **sp. n.** Galapagos VAN NAME Zoologica **5** p. 198 3 figs.

Thomsenia **gen. n.** for *T. damarensis* **sp. n.** S. W. Afr. Protect., PANNING Beitr. Kennt. D. Südwestafrikas **2** p. 173 1 fig.

Trichoniscus (*Oritoniscus*) *despaxi* **sp. n.** Haute-Pyrénées France, VANDEL Bul. Soc. Zool. Paris **49** p. 91 7 figs.—*T.* (*Trichoniscoides*) *caprae* **sp. n.** cave in Piedmont, Italy, COLOSI in CAPRA Atti Acc. Sci. Torino **59** p. 77.—*Trichoniscoides saeroeensis* **sp. n.** Sweden LOHMANDER Ent. Tidsk. Stockh. **45** p. 80 fig.

Tylos latreilli Galapagos descript. figs. p. 189, VAN NAME **318**.

AMPHIPODA.

Catalogue of Danish Amphipoda, STEPHENSEN **297**.

Descriptive catalogue of the Amphipods of Switzerland, CARL **54**.

Amphipods of the Balkan States, SCHÄFERNA **271**.

Amphipods of the Mediterranean and adjacent Atlantic, STEPHENSEN **296**.

The Amphipoda of the Ingolf-Expedition from Greenland waters and the North Atlantic, STEPHENSEN **295**.

New Zealand Amphipods, CHILTON **67**.

The Amphipoda of Connecticut monographed, KUNKEL **178**.

GAMMARIDEA.

Notes on Gammarids, SPANDL **289**.

Acidostoma nodiferum **sp. n.** N. Atlantic, STEPHENSEN Danish Ingolf-Exped. **3** pt. 8 p. 40 fig. 1.

Anonyx nugax distribution, 2 charts, variation, propagation etc. p. 78 fig. 17, STEPHENSEN **295**.

Aristias falcatus **sp. n.** N. Atlantic, STEPHENSEN Danish Ingolf-Expd. **3** pt. 8 p. 73 fig. 14.

Carinogammarus triacanthus p. 35 figs., *C. thoni* p. 42 figs., *C. scutarensis* p. 45 figs., *C. pungentiformis* p. 49

figs., **spp. n.**, Balkan States SCHÄFERNA Mem. Soc. Roy. Sci. Bohème for **1921–2.** —*C. annandalei* **sp. n.** Algeria, MONOD Ann. Mag. N. H. (9) **14** p. 234 figs.

Chelura insulae a wood-borer in Samoa and Honolulu figs. 1, 2, MILLER **208.**

Chiltonia mihiwaka structure gnathopod figured p. 271, CHILTON **67.**

Corophium bonelli in Denmark specific characters and review of the genus, USSING & STEPHENSEN **311.**

Cyclocaris guilelmi distribution p. 52 chart, STEPHENSEN **295.**

Cyphocaris anonyx distribution p. 50 chart, STEPHENSEN **295.**

Cyrtophium spongicola Welitch. = *Corophilum curvispinum* Sars, MARTYNOV **202.**

Echinogammarus fuscus aureus **subsp. n.** Angara river Siberia, DOROGOSTAJSKIJ Ann. Mus. Zool. Petrograd **21** p. 316 figs. 11–12.

Euonyx talismani appendages figured p. **41** fig. 2, STEPHENSEN **295.**

Fluviogammarus **gen. n.** for *F. larviformis* **sp. n.** Angara river, Siberia, DOROGOSTAJSKIJ Ann. Mus. Zool. Petrograd **21** p. 317 figs. 13–16.

Gallea crinita **sp. n.** coast Cape Prov. SPANDL Zool. Anz. **61** p. 243 2 figs.

Gammarus pulex physiology of nutrition, WILLER **324.**—*G. robustoides* note with fig. p. 119, DERJAVIN **83.**—*G. duebenii* temporary sexual characters, LEGUEUX **187.**—*G. chevreuxi* seasonal broods larval development, moults and intersexes, SEXTON **284.**—*G. balcanicus* p. 3 figs., *G. bosnaicus* p. 8 figs., *G. spinicaudatus* p. 14 figs., *G. konjicensis* p. 17 figs., *G. komareki* p. 21 figs. **spp. n.** Balkan States, SCHÄFERNA Mem. Soc. Roy. Sci. Bohème for **1921–2.**—*G. limnaeus* in hot springs in Yellowstone Park, U.S.A., BRUES **47.**—*G. gregoryi* **sp. n.** Yunnan, TATTERSALL J. Proc. Asiat. Soc. Beng. **19** p. 430 14 figs.—*G. tacapensis* **sp. n.** freshwater Tunisia, CHEVREUX & GAUTHIER Bul. Soc. hist. nat. Alger **15** p. 53 1 pl. 1 text-fig.—*G. kygi* **sp. n.** F. W. Kamchatka, DERSHAVIN Russ. Hydrob. Zs. **2** p. 185 pl. i.

†*Gammarus alsaticus* **sp. n.** Oligocene Alsace v. STRAELEN Bul. Acad. roy. Bruxelles (5) **10** p. 328.

Heterogammarus brachyurus **sp. n.** Angara river, Siberia, DOROGOSTAJSKIJ Ann. Mus. Zool. Petrograd **21** p. 311 figs. 4–10.

Hippomedon serratipes p. 91 fig. 18, *H. frigidus* p. 92 fig. 19, *H. nasutus* p. 93 fig. 20, *H. reticulatus* p. 94 fig. 21, *H. striolatus* p. 95 fig. 22, **spp. n.**, N. Atlantic STEPHENSEN Danish Ingolf-Exped. **3** pt. 8.

Kamaka **gen. n.** (Corophiidae) p. 188 for *K. kuthae* **sp. n.** fresh-water Kamchatka DERSHAVIN Russ. Hydrob. Zs. **2** p. 189 pls. iii, iv.

Karoga (*megalops* ?) p. 60 fig. 5, STEPHENSEN **295.**

Metambasia **gen. n.** for *M. faeroensis* **sp. n.** nr. Faeroe Is., STEPHENSEN Danish Ingolf-Exped. **3** pt. 8 p. 76 figs. 15–16.

Neoniphargus branchialis **sp. n.** freshwater W. Australia, NICHOLLS J. R. Soc. W. Austral. **10** p. 105 2 pls.

Niphargus, note on systematics and no. of species, ROSE **259.**—*N. dudichi* **sp. n.** well in Hungary, HANKÓ Ann. Mus. Budapest **21** p. 61 8 figs.—*illidzensis* **sp. n.** p. 51 figs., *N. i. dalmatina* **var. n.** p. 56 figs. Balkan States, SCHÄFERNA Mém. Soc. Roy. Sci. Bohème for **1921–2.**

Onisimus edwardsii, *O. plautus* distribution 2 charts p. 36, *O. leucopsis* ? p. 49 fig. 3, STEPHENSEN **295.**

Orchestia ditmari **sp. n.** fresh-water Kamchatka, DERSHAVIN Russ. Hydrob. Zs. **2** p. 187 pl. vi.

Orchomene oxystoma p. 67 fig. 10, *O. thorii* p. 68 fig. 11, *O. laevipes* p. 69 fig. 12 pt., *O. faeroensis* p. 70 fig. 13, **spp. n.**, N. Atlantic and key of all the species, STEPHENSEN Danish Ingolf-Exped. **3** pt. 8.

Orchomenella nana remarks p. 12, STEPHENSEN **297.**

Pallasea laevis **sp. n.** Novaya Zemlya, EKMAN Report Norwegian Exped. p. **45** figs.—*P. viridis angarensis* **subsp. n.** Angara river Siberia, DOROGOSTAJSKIJ Ann. Mus. Zool. Petrograd **21** p. 321.

Paraleptamphopus caeruleus, *P. subterraneus* range, habitat and structure in N. Zealand figures p. 273, CHILTON **67**.

Paralibrotus **gen. n.** for *P. setosus* **sp. n.** W. Greenland seas, STEPHENSEN Danish Ingolf-Exped. **3** pt. 8 p. 61 figs. 6, 7.

Pontamogammarus aralensis distr. and synonymy, MARTYNOV **202**.

Pseudalibrotus litoralis distribution p. 56 chart, *P. glacialis* p. 58 fig. 4, STEPHENSEN **295**.

Seba typica status of this and other described species p. 269, CHILTON **67**.

Synnella ambulans in Hungary, DUDICH **90**; in Montenegro status and distrib. and anatomy of antennal gland p. 57, SCHÄFERNA **271**.

Tetradeion crassum generic diagn. and details of structure p. 631 20 figs., CHILTON **67**.

Tetronychia **gen. n.** for *T. abyssalis* **sp. n.** Iceland seas, STEPHENSEN Danish Ingolf-Exped. **3** pt. 8 p. 63 figs. 8–9.

Tmetonyx quadratus **sp. n.** Connecticut coast KUNKEL Bul. Conn. State Geol. N. H. Surv. **26** 1918 p. 55.

HYPERIIDEA.

The Amphipoda Hyperiidea of the Adriatic, SPANDL. **291**.

Brachysaellidae **nom n.** pro Euthamneidae p. 37, STEPHENSEN **295**.

Euscelus steueri **sp. n.** Adriatic, SPANDL Zool. Anz. **58** p. 268 fig. 2.

Hyperia macrodactyla **sp. n.** Mediterranean with remarks and figs. of other species, STEPHENSEN Rep. Danish Ocean. Exped. p. 90 fig. 35.—*H. medusarum* and *H. galba* distribution N. Atlantic p. 15 3 charts, STEPHENSEN **295**.—*H. dysschistus*, *H. schizogeneios* in the Adriatic p. 265, SPANDL **291**.

Hyperoche mediterranea descript. figs. p. 79, STEPHENSEN **296**.

Paraphronima gracilis in the Adriatic, fig. 1 p. 263, SPANDL **291**.

Phronima review of species with key p. 113, STEPHENSEN **296**.

Themisto compressa and *T. bispinosa* relationships discussed, not distinct species p. 103 figs., STEPHENSEN **296**.—*T. libellula*, *T. compressa* distribution N. Atlantic 2 charts, STEPHENSEN **295**.

CAPRELLIDEA.

(Vacant.)

PHYLLOCARIDA.

(Vacant.)

ENTOMOSTRACA.

(General Papers.)

The Cladocera and Copepoda of Lake Constance, horizontal and vertical distribution, etct., AUERBACH and others **14**.

The ecology and zoogeographical relations of Icelandic marine and freshwater Entomostraca, POULSEN **246**.

Freshwater Entomostraca of Cape Prov. and Kerguelen, RÜHE **266**.

New Zealand Entomostraca, HENRY **139**.

Entomostraca of Colorado, DODDS **87**.

Morphology and Physiology of the feeding apparatus of the Daphnidae and also of the other Cladocera and Euphyllopods, STORCH **300**.

The mutual relations of Entomostraca and the flora in freshwater, REINSCH **257**.

Effect of hemp dissolved in water on Cladocera and Copepoda, PASQUINI **237**.

Methods of breeding Entomostraca from dried mud, HENRY **140**.

BRANCHIOPODA.

PHYLLOPODA.

Distribution of Apusidae in European and Asiatic Russia, DECKSBACH **80**.

Phyllopods of S.W. Africa, BARNARD **22**.

The Phyllopods of New South Wales monographed, HENRY **138**.

The glandular function of the median eye in Phyllopods, KOLLMAN **173 174**.

Apus taxonomic notes and distribution of species, *A. dukianus* fig. of type, GURNEY **121**.—*A. ovamboensis* **sp. n.** S.W. Africa, BARNARD Ann. S. Afr. Mus. **20** p. 215.

Artemia salina tetraploidism, ARTOM **13**; regeneration of furca, SCIACCHITANO **280**; circulatory system, anat. and physiol., GREENE **118**.—*A. s.* var. *principalis* larval development 17 figs., HEATH **133**.

Branchinecta occidentalis larval development 12 figs., HEATH **133**.—*B. tenuis* p. 127 3 figs., *B. parooensis* p. 128 4 figs. N.S. Wales, HENRY Proc. Linn. Soc. N.S.W. **49**.

Branchinella frondosa p. 130 10 figs., *B. proboscidea* p. 131 8 figs. N.S. Wales, HENRY Proc. Linn. Soc. N.S.W. **49**.

Branchinellites ondonguae **sp. n.** S.W. Africa, BARNARD Ann. S. Afr. Mus. **20** p. 216 fig. 1.

Branchipodopsis simplex, p. 217 figs. 2 3, *B. browni* p. 217 fig. 4 **spp. n.** S. W. Africa BARNARD Ann. S. Afr. Mus. **20**.

Branchipus resistence to salt water, HUSS **146**.

Chirocephalus stagnalis distrib. status and habits, DESPAX **86**.—*C. diaphanus* in Herts and elsewhere in England, SELTMAN **281**.

†*Cyzicus* (*Euestheria*) *draperi*. descript. p. 326, HAUGHTON **132**.

Eocyzicus gigas **sp. n.** S.W. Africa, BARNARD Ann. S. Afr. Mus. **20** p. 226 figs. 16–17.

Estheria postnaupliar stages and organogeny 7 pls. and 6 figs., CANNON **52**.—*E. rubra* **sp. n.** N.S. Wales, HENRY Proc. Linn. Soc. N.S.W. **49** p. 134 2 figs.

†*Estheria koreana*, *E. kawasakii*, **spp. n.**, Rhaetic beds Korea, OZAWA & TORU Japan. J. Geol. **2** p. 41 figs.

Eubranchipus gelidus habits, habitat larvae, etct. nr. Ottawa 3 figs., JOHANSEN **155**.

Eulimnadia cygnorum characters etct. W. Australia p. 59, GLAUERT **114**.

Lepidurus apus geographic spanandry *i.e.*, males disappear in north parts of range, VANDEL **317**.

†*Lepidurus stormbergensis* **sp. nov.** Stormberg beds Cape Prov., HAUGHTON Ann. S. Afr. Mus. **12** p. 328.

Leptestheria brevirostris fig. 18, *L. striatoconcha* fig. 19, **spp. n.**, S.W. Africa BARNARD Ann. S. Afr. Mus. **20** p. 227.

Limnadia lenticularis in Switzerland KEISER **160**.

Limnadopsis parvispinus **sp. n.**, HENRY Proc. Linn. Soc. N.S.W. **49** p. 132 7 figs.

Limnetis gouldii habits and occurrence nr. Ottawa, JOHANSEN **155**.

Lynceus truncatus figs. 5–11, *L. bicarinatus* figs. 12- 15, **spp. n.**, S.W. Africa, BARNARD Ann. S. Afr. Mus. **20** p.224.—*L. brachyurus* aberr. *isorhynchus* the preponderance of females and the formation of new species, BOWKIEWICZ **35**.

†*Polyphyma angelini* p. 52 fig., POULSEN **245**.

Streptocephalus ovamboensis p. 220, *S. indistinctus* p. 221, *S. cladophorus* p. 222 **spp. n.**, S.W. Africa, BARNARD Ann. S. Afr. Mus. **20**.

Triops [*Apus*] further remarks on the Mediterranean species, GHIGI **109**.

CLADOCERA.

Cladocera of flowing streams in Austria, SPANDL, **288**.

The Freshwater Cladocera of the eastern Alps, PESTA **241**.

The Cladocera-fauna of the Tatra lakes in Galicia, LITYNSKI **192**.

Cladocera of Lithuania with key of families, etct., LITYNSKI **190**.

Cladocera of Aral, KARSINKIN **159**.

Cladocera from Ceylon, BÄR **20**.

Morphology of the Cladoceran appendages and their phylogenetic significance, LITYNSKI **191**.

Analysis of the growth and variation of the Cladoceran shell in several species, WERNER **322**.

Alona capensis **sp. n.** nr. Cape Town, RÜHE Deutsch. Südpol. Exped. **8** p. 19.

Alonella kulczyńskii **sp. n.** Java, GROCHMALICKI Bul. Intern. Acad. Krakow **1915** B p. 225 fig. 7.

Alonopsis lomnickii **sp. n.** Java, GROCHMALICKI Bul. Intern. Acad. Krakov **1915** B p. 226 fig. 8.

Bosmina coregoni p. 183 figs. 2–7, *B. longirostris* p. 187 figs. 8–12 in Bavarian lakes descript. and life history, SCHMIDT **273.**—*B. longirostris tatrensis* **forma n.** Galicia, MINKIEWICZ Bul. Intern. Acad. Krakow **1916** B p. 56 figs. 1–3.—*B. fatalis* **sp. n.** China with notes and figs. of other species, BURCKHARDT Rev. Hydrob. **2** p. 235.

Bosminopsis deitersi review of races with figs. p. 222, BURCKHARDT **50.**

Ceriodaphnia rigaudi and *C. cornuta* in Ceylon variation etct. p. 98 figs., BÄR **20.**

Chydorus macquariensis **sp. n.** fresh water Macquarie I., BRADY Sc. Rep. Austral. Antarc. Exped. **5** pt. 4 p. 5 3 figs.

Daphnia phototaxis experiments, ALVERDES **5.**; in the Obing lake Bavaria p. 190 figs. 13–21 descript. and life history, SCHMIDT **273.**—*D. pulex* developement of the summer eggs, RAMAULT **251.**—*D. magna* raised in a pure culture, TREILLARD **307.**—*D. cucullata* and *D. longispina* variation in neighbouring lakes in Italy, VOLTERRA **321.**—*D. longispina* on the ephippial eggs, DEHORNE **81.**—*D. carinata* in Ceylon variation etct. p. 89 pl. 6 figs. 1–2 textfig. 4, *D. lumholtzii* growth stages p. 93, BÄR **20.**—*D.* (*Cephaloxus*) *longiremis* in Novaya Zemlya fig. p. 8, EKMAN **94.**

Daphaniopsis studeri **sp. n.** Kerguelen, RÜHE Deutsch. Sudpolar Exped. Zool. **8** p. 40 figs. 15–17.

Diaphanosoma sarsii in Ceylon p. 87 3 figs., BÄR **20.**

Dunhevedia crassa in Ceylon p. 108, BÄR **20.**—*D. siedleckii* **sp. n.** Java, GROCHMALICKI Bull. Intern. Acad. Krakow **1915** B p. 227 fig. 9.

Graptoleberis testudinaria var. *orientalis* **var. n.** Ceylon, BÄR Jenaische Zs. **60** p. 112 fig.

Holopedium gibberum on the gelatinous house or shell and its use, NAUMANN **226**; in the Tatra lakes structure etct. p. 266 figs. 1–5, MINKIEVICZ **210.**

Macrothrix triserialis nr. Cape Town descript. fig. p. 21, RÜHE **266.**

Moina macrocopa var. *brevicaudata* **var. n.** Ceylon, BÄR Jenaisch. Zs. **60** p. 102 pl. vi figs. 4, 5.

Penilia schmackeri in the Gulf of Naples, CAROLI **55.**

Polyphemus pediculus myology and endoskeleton embryology and anatomy, HUMPERDINCK **144.**

Pseudosida bidentata nr. Cape Town fig. p. 10, RÜHE **266.**

Simocephalus exspinosus var. *congener* in Ceylon p. 95, BÄR **20.**—*S. serrulatus mixta* **var. n.** Java, GROCHMALICKI Bul. Intern. Acad. Krakov **1915** B p. 220 fig. **3.**—*S. gelidus* **sp. n.** freshwater Macquarie I., BRADY Sc. Rep. Austral. Ant. Exped. **5** pt. 4 p. 5 4 figs.—*S. vetulus* experimental; influence of darkness and hunger on the eye, JERMAKOFF **153.**

COPEPODA.

The food habits of the Copepods in Swedish freshwater lakes, NAUMANN **224.**

Pelagic Copepods of French coasts (Atlantic and Mediterranean), ROSE **261.**

The Freshwater Copepoda of the eastern Alps, PESTA **241.**

Copepods of Lake Trasimene, Italy, PASQUINI **238.**

The variation in size and morphology in Adriatic plankton Copepods FRUCHTL **101, 102.**

Parasitic Copepods from Baie de Lévrier, nr. Cape Blanco N.W. Afr., BRIAN **42.**

The Copepods of Chilka Lake India with descriptions and figures of many species old and new and remarks on the variation in salinity and other local conditions in the Lake. SEWELL **283.**

Report on the Copepoda of the Australian Antarctic Exped. from New Zealand seas, BRADY **37.**

Parasitic Copepods from the Galapagos, WILSON **326.**

Copepoda of the Californian Coasts, ESTERLY **95.**

The Copepods of the plankton of the W. Greenland coasts p. 110, JESPERSEN **154.**

New localities, new hosts and nomenclatural notes on American Parasitic Copepods, WILSON **325.**

A review of genera and species of the Notodelphyidae with descriptions of many new species and general account, SCHELLENBERG **272.**

Key of the genera of the freshwater Centropagidae, MARSH **198.**

The food of Copepods, PÜTTER **249.**

Phototropism in the pelagic Copepods, ROSE **260.**

Seasonal variation in the Copepods of the marine plankton, ADLER & JASPERSEN **1.**

The question of Symbiosis between subterranean Copepods and Sulphur-bacteria, ÜTERMOHL **312.**

On longevity in Copepods and Ostracods, KORSCHELT **175.**

Allelogenesis (survival under changed conditions) in Copepods, LABBÉ **180.**

The following new names for preoccupied old ones in Parasitic Copepods, WILSON P.U.S. Nat. Mus. **64** art. 17.—

Tranestoma vice *Aplostoma* CANU.
Sacodiscus vice *Amphidiscus* NORMAN.
Comantenna vice *Bryaxis* SARS.
Campella vice *Camptonyx* LILLJ.
Ceyloniella vice *Ceylonia* THOMS. & SCOTT.—All p. 14.

Thoostoma vice *Conostoma* THOMS.
Vettoria vice *Corina* GIESBR.
Aphanodomus vice *Crypsidomus* LEVENSEN.
Hypogastrion vice *Gastroides* HESSE.
Hypnoticus vice *Hypnodes* HESSE.
Lourinia vice *Jurinia* CLAUS.
Areotrachelus vice *Leptotrachelus* BRIAN.—All p. 15.

Rudolfia vice *Leuckartia* CLAUS.
Monachops vice *Monops* LUBBOCK.
Narcodina vice *Narcodes* HESSE.
Sarsameira vice *Parameira* SARS.
Dwightia vice *Setella* DANA.
Thespesiopsyllus vice *Thaumatopsyllus* SARS.—All p. 16.

Sarsocletodes vice *Pseudocletodes* SARS.—p. 21.

Acartia horizontal, vertical and quantitative distr. of species in Atlantic and Indian Oceans, GIANFERRARI **110**; Review of species, account of gonads, geograph. distr. with many figures and notes, STEUER **298.**—*A. clausi* p. 103 figs. L, M; *A. tonsa* p. 105 figs. N. O. on Californian coasts, ESTERLY **95.**

Amphiascus elegans p. 31 12 figs., *A. ignotus* p. 32 5 figs. **spp. n.**, New Zealand seas, BRADY Sc. Rep. Austral. Ant. Exped. **5** pt. 3.—*A. scotti* **nom. n.** for *Dactylopus propinquus* T. Scott p. 819, SEWELL **283.**

Anchistrotos occidentalis **sp. n.** Massachusetts coast on Filefish, WILSON P.U.S.N. Mus. **64** art. 17 p. 6 figs.

Aplostoma gibbera **sp. n.** New Zealand SCHELLENBERG Mitt. Zool. Mus. Berlin **10** p. 289 figs. 5–7.

Artaxolax monodi **sp. n.** on *Tetrodon* nr. Cape Blanco W. Afr. p. 11 4 figs., BRIAN **42.**

Attheyella capensis **sp. n.** nr. Cape Town, RÜHE Deutsch. Sudpolar Exped. Zool. **8** p. 32 figs.

Basanistes coregoni descript. on gills *Coregonus* in Bodensee p. 256 figs. 28–33, ZANDT **337.**

Boeckella review of species with diagnoses and figures p. 4, MARSH **198.**

Bomolochus unicirrus female descript. fig. p. 9, BRIAN **42.**

Bonnierilla acollaris S. W. Australia p. 250 fig. 29, *B. brevipes* Billiton, Malayia p. 251 figs. 30–31, *B. armata* S. W. Australia p. 252 fig. 32, **spp. n.**, SCHELLENBERG Mitt. Zool. Mus. Berlin **10.**

Botryllophilus aspinosus Plymouth p. 283 fig. 1, *B. africanus* Angola p. 284 figs. 3–4, **spp. n.**, SCHELLENBERG Mitt. Zool. Mus. Berlin **10.**

Brunella steeli **sp. n.** New Zealand, HENRY Proc. Linn. Soc. N.S.W. **49** p. 315 5 figs.

Calanus finmarchicus food chiefly diatoms, MARSHALL **200**; in California p. 83 fig. A, ESTERLY **95.**—*C. hyperboreus* and *C. finmarchicus* in plankton of W. Greenland coast distrib. etct. p. 113, JESPERSEN **154.**—*C. aculeatus* **sp. n.** New Zealand seas, BRADY Sc. Rep. Austral. Ant. Exped. **5** pt. 3 p. 14 5 figs.

Caligus deformis p. 17 2 figs. on *Cantharus*, *C. mauritanicus* p. 19, 5 figs. on *Sciaena*, **spp. n.**, *C. m. minuscula* p. 23, *C. m. temnodontis* p. 27 **varr. n.** with figs. N.W. Africa, BRIAN **42.**

Calocalanus styliremis new to the Adriatic, FRUCHTL **102.**

Campopera **gen. n.** (Notodelphyidae) for *C. michaelseni* **sp. n.** Falkland Is., SCHELLENBERG Mitt. Zool. Mus. Berlin **10** p. 259 figs. 41–43.

Canthocamptus horwathi (= *C. trispinosus* Daday nec Brady) p. 100 1 fig., *C. dadayi* (=*C. northumbrinus* Daday nec Brady) p. 102 figs. Patagonia and other rectifications of nomenclature and synonymy, CHAPPUIS Bul. Soc. Sti. Cluj. **2.**—*C. pygmaeus* note on appendages p. 200 7 figs., KEIFER **164.**—*C. arndti* **sp. n.** Bulgaria, KIEFER Zool. Anz. **61** p. 301 figs. — *C. cuspidatoides* **sp. n.** fresh-water, Black Forest, KIEFER Zool. Anz. **59** p. 304 6 figs.—*C. minutus* experiments with egg and formation of fresh mutants, LABBÉ **183**; allelogenesis and notes on nomenclature, LABBÉ **181.**—*C. mrazeki* p. 60 figs. 7, 9, 10, *C. mirus* p. 64 figs. 8, 11, 12, **spp. n.**, *C. zschokkei tatrensis* **var. n.** p. 62 all Galicia, MINKIEWICZ Bul. Intern. Acad. Krakow **1916** B.—*C. elaphoides* p. 29 11 figs., *C. georgewitchi* p. 33 7 figs. caves Serbia, CHAPPUIS Bul. Soc. Sti. Cluj **2** pt. 2.—*C. gauthieri* **sp. n.** Algeria in moss, ROY. Bul. Soc. Zool. Paris **49** p. 461 18 figs. — *C. surinamensis* p. 2 fig. 1, *C. guyanensis* p. 4 fig. 2, *C. pectinatus* p. 6 fig. 3, *C. menzeli* p. 7 fig. 4, *C. kalima* p. 8 fig. 5, *C. acanthophorus* p. 10 fig. 6 **spp. n.**, Surinam, DELACHAUX Zool. Anz. **59.**

Centhonectes **gen. n.** for *C. serbicus* **sp. n.** cave Serbia, CHAPPUIS Bul. Soc. Stii. Cluj **2** pt. 2 p. 38 4 figs.

Chondracanthus nodosus conjunctive tubes with figures p. 291, LEIGH-SHARPE & PERKINS **188.**

Clausocalanus arcuicornis Californian coast p. 86 fig. C. ESTERLY **95.**

Clavella dubia male described and figured p. 294, LEIGH-SHARPE & PERKINS **188.**

Cleta-secunda **sp. n.** Chilka Lake India, SEWELL Mem. Ind. Mus. **5** p. 835 figs.

Ctenocalanus vanus Californian coasts p. 91 figs. D, E, ESTERLY **95.**

Cyclopina intermedia p. 792 figs, *C. longifurca* p. 794 figs., **spp. n.**, Chilka Lake India, SEWELL Mem. Ind. Mus. **5.**

Cyclops teres **nom. n.** for *C. clausii* Heller preocc., WILSON P. U. S. N. Mus. **64** art. 17 p. 17.—*C. crassicaudis* in Germany habits, etct., GAGERN **103.**—*C. stygius* **sp. n.** cave, Serbia, CHAPPUIS Bul. Soc. Sti. Cluj **2** pt. 2 p. 27 2 figs.—*C. croaticus* **sp. n.** Yugoslavia, KRMPOTIĆ Arch. Hydrob. Stuttgart 15 p. 42 figs. 29–31.—*C. robustus* in Bulgaria descript. p. 298 fig. 1, KIEFER **167.**—*C. languidus intermedius* **var. n.** Baden, KIEFER Zool. Anz. **58** p. 278.—*C. gibsoni* and *C. nubicus* distinctions with figs., *C. planus* a Mediterranean form, KIEFER **166.**— *C. strenuus* in Novaya Zemlya fig. p. 12, EKMAN **94.**—*C. oithonoides*, brain, HANSTRÖM **129.**

Diaptomus vulgaris red colouring, BLAAS, **31.** — *D. castor* oogenesis, HEBERER **134.**—*D. theeli* p. 47 figs., ZIMMERMANN **338.**—*D. denticornis* in the Black Forest p. 203, KIEFFER **164.**—*D. soštarići* **sp. n.** Yugoslavia and other Yugoslav species described and figured, KRMPOTIĆ Arch. Hydrob. Stuttgart **15** p. 16 figs. 1, 6.—*D. alluaudi* found in Galicia, SIMM **286.**—*D. eiseni occidentalis* **var. n.** E. Siberia, RYLOV Rev. Russ. Entom. **18** p. 1 figs.—*D. ziegelmeyeri* **sp. n.** Tunisian Sahara, BREHM Zool. Anz. **59** p. 310 2 figs.—*D. javanus* **sp. n.** p. 229 fig. 12, *D. orientalis malaica* **var. n.** p. 228 fig. 11 Java, GROCHMALICKI Bull. Intern. Acad. Krakow 1915 B.—*D. rappeportae* **sp. n.** freshwater Java and other Javanese species noted, BREHM Treubia **3** p. 227 3 figs.—*D. washingtonensis* noted from Colorado p. 2, DODDS **87.**—*D. bacillifer* found in Alaska also = *D. arapahoensis* Dodd, MARSH **199.**

Diarthropus **gen. n.** for *D. torticornis* **sp. n.** New Zealand seas., BRADY Sc. Rep. Austral. Ant. Exped. **5** pt. 3 p. 15 9 figs.

Doropygus cylindriformis G. of Suez p. 241 figs. 21–22, *D. lamellipes* Falkland Is., p. 242 fig. 23, *D. antarcticus* Falkland Is. p. 243, *D. novemsetiferus* G. of Suez p. 244, *D. novaesealandicus* New Zealand p. 244, *D. longimatrix* G. of Suez p. 245 figs. 24–25, *D. spiniferus*

S. W. Australia p. 248, *D. trisetosus* New Zealand p. 249 **spp. n.** *D. t. kerguelensis* **subsp. n.** Kerguelen p. 249 fig. 28, SCHELLENBERG Mitt. Zool. Mus. Berlin **10**.

Enterocolinae **subf. n.** p. 361, CHATTON & HARANT **63**.

Enterocola clavellinae p. 355 fig. 1, *E. sydnii* p. 357 fig. 2, *E. hessei* p. 359 fig. 3 all in Ascidians on Channel coasts France, CHATTON & HARANT Bul. Soc. Zool. Paris **49**.

Enteropsis onychophorus **sp. n.** New Zealand, *E. sphinx georgianus* **var. n.** S. Georgia, SCHELLENBERG Mitt. Zool. Mus. Berlin **10** p. 291.

Epactophanes richardi note p. 204, KIEFER **164**.—*E. richardi* in Sumatra note and figs., MENZEL **206**.

Euchaetopsis **gen. n.** for *E. haswelli* **sp. n.** New Zealand seas, BRADY Sc. Rep. Austral. Ant. Exped. **5** pt. 3 p. 21 7 figs.

Euchirella plumosa, E. tumida **spp. n.** New Zealand seas., BRADY Sc. Rep. Austral. Antarct. Expd. **5** pt. 3 p. 20.

Eudactylina complexa p. 39 6 figs. on *Squalina, E. dollfusi* p. 41 9 figs. on Shark **spp. n.** Cape Blanco N.W. Afr. BRIAN **42**.

Eurytemora velox on a new sense organ at base of antenna of the male allomorph, LABBÉ, **182**.—*E. hirundoides* Californian coasts p. 93 fig. F, G, ESTERLY **95**.

Flabellicola neapolitana structure and evolution, GRAVIER **116 117**; mode of life in Polychete host, *Flabelligera*, GRAVIER **115**.

Gaetanus antarcticus **sp. n.** New Zealand seas, BRADY Sc. Rep. Austral. Antarct. Exped. **5** pt. 3 p. 19 7 figs.

Gaidius glacialis **sp. n.** New Zealand seas, BRADY Sc. Rep. Austral. Antarct. Exp. **5** pt. 3 p. 19 9 figs.

Gunenotophorus globularis giganteus **var. n.** S. Africa, *G. spinipes* **sp. n.** Magellan Str., SCHELLENBERG Mitt. Zool. Mus. Berlin **10** p. 258.

Halicyclops tenuispina **sp. n.** Chilka Lake India, SEWELL Mem. Ind. Mus. **5** p. 796 figs.

Haplosaccus **gen. n.** for type *H. sacculus* Ch. & B. 1910, CHATTON & HARANT Bul. Soc. Zool. Paris **49** p. 419.

Haplostomella **gen. n.** for type *H. malacocera* **sp. n.** p. 399 fig., *H. tuberculata* **sp. n.** p. 402 figs. Mediterranean with note on the oostegites, CHATTON & HARANT Bul. Soc. Zool. Paris **49**.

Haplostomides **gen. n.** for type *H. scotti* **sp. n.** p. 408 figs. Channel, also *H. brementi* **sp. n.** p. 410 figs. G. of Lyons, CHATTON & HARANT Bul. Soc. Zool. Paris **49**.

Haplostominae **subsp. n.** p. 415, CHATTON & HARANT **63** for *Haplostoma canui* **sp. n.** English Channel, CHATTON & HARANT Bul. Soc. Zool. Paris **49** p. 413 figs.

Harpacticella lacustris **sp. n.** Chilka Lake India, SEWELL Mem. Ind. Mus. **5** p. 813 figs.

Harpacticus gracilis orientalis **var. n.** Chilka Lake India, SEWELL Mem. Ind. Mus. **5** p. 811 figs.

Hermanella cynthiae **sp. n.** on *Cynthia* near Cape Blanco W. Afr. 6 figs. p. 5, BRIAN **42**.

Heterocope weismanni spermatogenesis, HEBERER, **134**.—*H. soldatovi, H. septentrionalis* description of both sexes, synonymy, nomenclature, and key of genus, RYLOW **268**.

Heterorhabdus austrinus, H. farrani, H. nigrotinctus **spp. n.** New Zealand seas, BRADY Sc. Rep. Austral. Ant. Exped. **5** pt. 3 p. 27 9 + 9 + 9 figs.

Idyaea ensifera indica **var. n.** Chilka Lake India, SEWELL Mem. Ind. Mus. **5** p. 817.

Isias tropica **sp. n.** Chilka Lake India, SEWELL Mem. Ind. Mus. **5** p. 782 figs.

Itunella subsalsa probably = *Paramoraria muelleri*, GAGERN **103**.

Laophonte quinquespinosa **sp. n.** Chilka Lake India, SEWELL Mem. Ind. Mus. **5** p. 833 figs.

Laophontodes latissimus p. 33 9 figs., *L. antarcticus* p. 33 8 figs., *L. echinatus* p. 33 8 figs. **spp. n.** New Zealand seas, BRADY Sc. Rep. Austral. Ant. Exped. **5** pt. 3.

Lequerrea **gen. n.** for *L. perezi* **sp. n.** parasite in Ascidian nr. Brest, CHATTON & HARANT Bul. Soc. Zool. Paris **49** p. 349 figs.

Lernaeopoda obesa **sp. n.** on *Mustelus* Cape Blanco N. W. Afr. p. 48 fig., BRIAN **42.**

Lernanthropus theodori **sp. n.** on *Dentex* Cape Blanco N. W. Afr. p. 36 1 fig., BRIAN **42.**

Lucicutia flavicornis on Californian coasts p. 98 figs., ESTERLEY **95.**

Maraenobiotus vejdovskyi tenuispina **var. n.** Rambouillet France, ROY Bul. Soc. Zool. Paris **49** p. 36 12 figs.

Mawsonella **gen. n.** for *M. typica* **sp. n.** New Zealand seas, BRADY Sc. Rep. Austr. Ant. Exped. **5** pt. 3 p. 30 8 figs.

Metridia longa and other Copepods in the plankton of W. Greenland coast p. 12, JESPERSEN **154.**—*M. andraeana* p. 25 4 figs., *M. trispinosa* p. 26 6 figs. **spp. n.** New Zealand seas, BRADY Sc. Rep. Austral. Ant. Exped. **5** pt. 3.—*Metridia* sp. California coasts p. 96 fig. H. ESTERLEY **95.**

Microchelonia glacialis **sp. n.** Macquarie I., BRADY Sc. Rep. Austral. Ant. Exped. **5** pt. 3 p. 34 6 figs.

Moraria stankovitchi **sp. n.** cave in Serbia, CHAPPUIS Bul. Soc. Sti. Cluj **2** pt. 2 p. 36 7 figs.

Nessipus costatus p. 213 8 figs., *N. occultus* p. 214 8 figs. from Shark, Galapagos Is., WILSON Zoologica **5.**

Nitocra spinipes orientalis p. 827 figs., *N. typica lacustris* p. 828 **varr. n.** Chilka Lake India, SEWELL Mem. Ind. Mus. **5** figs.

Nitocrella **gen. n.** for *N. hirta* **sp. n.** cave Serbia, CHAPPUIS Bul. Soc. Sti. Cluj **2** pt. 2 p. 41 7 figs.

Noabranchia lizae subpinguis **var. n.** p. 55 3 figs., *N. variabilis* **sp. n.** p. 57 5 figs. on *Tetrodon* Cape Blanco N. W. Afr., BRIAN **42.**

Notodelphyopsis **gen. n.** (Notodelphyidae) p. 237 for *N. falciferus* **sp. n.** S. W. Australia p. 237 figs. 17–20, SCHELLENBERG Mitt. Zool. Mus. Berlin **10.**

Notodelphys patagonica Patagonia p. 228 fig., *N. ciliata* Gulf of Suez p. 28 fig. 2, *N. squamifera* W. Africa p. 230 figs. 3, 4, *N. pachybrachia* G. of Suez p. 231 figs. 5, *N. parva* G. of Suez p. 231 fig. 7 **spp. n.**, SCHELLENBERG Mitt. Zool. Mus. Berlin **10.**

Notopterophoroides **gen. n.** (Notodelphyidae) p. 254 for *N. armadillo* S. W. Australia p. 255 figs. 33–35, *N. malacodermatus* G. of Suez p. 256 figs. 36–37 **spp. n.**, SCHELLENBERG Mitt. Zool. Mus. Berlin **10.**

Paranotodelphys **gen. n.** (Notodelphyidae) p. 232 for *P. scutiformis* S. W. Australia p. 233 figs. 9–11, *P. gracilis* G. of Suez p. 235 figs. 12–14, *P. longicauda* Antarctic p. 236 figs. 15–16 **spp. n.**, SCHELLENBERG Mitt. Zool. Mus. Berlin **10.**

Oithona atlantica var. of *O. plumifera* Baird p. 141 figs., FRUCHTL **102.**

Paracalanus parvus Californian coasts p. 86 fig. B, ESTERLY **95.**—*P. mariae* **sp. n.** off Tasmania, BRADY Sc. Rep. Austral. Ant. Exped. **5** pt. 3 p. 17 6 figs.

Paraeuchaeta plumifera **sp. n.** New Zealand seas, BRADY Sc. Rep. Austral. Antarc. Exped. **5** pt. 3 p. 21 5 figs.

Paralabidocera amphitrites Californian coasts p. 99 figs. J, K, ESTERLY **95.**

Parapandarus **gen. n.** p. 7 for *P. nodosus* **sp. n.** Massachusetts Coast p. 8 figs., WILSON P. U. S. N. Mus. **64** art. 17.

Parastenocaris jeanneli **sp. n.** cave Serbia, CHAPPUIS Bul. Soc. Sti. Cluj **2** pt. 2 p. 44 5 figs.—*P. leeuweni* **sp. n.** in moss Sumatra, MENZEL Treubia **3** p. 190 9 figs.—*P. chelifer* **sp. n.** Surinam DELACHAUX Zool. Anz. **59** p. 13 fig. 8.

Parategastes sphaericus similis **var. n.** Chilka Lake India, SEWELL Mem. Ind. Mus. **5** p. 815 figs.

Peniculus clavatus addt. description with 3 figs. p. 289, LEIGH-SHARPE & PERKINS **188.**

Plagiopus **gen. n.** for *P. australis* **sp. n.** New Zealand seas, BRADY Sc. Rep. Austral. Ant. Exped. **5** pt. 3 p. 22 9 figs.

Pleuromamma distribution in Atlantic, PISEK **243**.— *P. wolfendeni* **sp. n.** off Macquarie I., BRADY Sc. Rep. Austral. Ant. Exped. **5** pt. 3 p. 26 9 figs.

Pseudoboeckella review of species with diagnoses and figures p. 18, MARSH, **198**.

Pseudocaligus apodus **sp. n.** on *Mugil* Cape Blanco N.W. Afr. p. 29 2 figs., BRIAN **42**.

Pseudoöthrix **gen. n.** for *P. anatina* **sp. n.** New Zealand seas, BRADY, Sc. Rep. Austral. Ant. Exped. **5** pt. 3 p. 22 11 figs.

Saphirella indica **sp. n.** Chilka Lake India, SEWELL Mem. Ind. Mus. **5** p. 800 figs.

Spinocalanus giesbrechti **sp. n.** off Macquarie I., BRADY Sc. Rep. Austral. Ant. Exped. **5** pt. 3 p. 17 5 figs.

Stenhelia (?) *glacialis* **sp. n.** off Macquarie I., BRADY Sc. Rep. Austral. Exped. **5** pt. 3 p. 32 6 figs.

Stephos simillimus **sp. n.** New Zealand seas, BRADY Sc. Rep. Austral. Ant. Exped. **5** pt. 3 p. 24 7 figs.

Streptocalanus **gen. n.** for *S. typicus* **sp. n.** New Zealand seas, BRADY Sc. Rep. Austral. Ant. Exped. **5** pt. 3 p. 18 9 figs.

Thalestris valida **nom. n.** for *T. robusta* Brady preocc., WILSON P.U.S.N. Mus. **64** art. 17 p. 17.

Tortanus discaudatus on Californian coasts p. 109 fig. P, ESTERLY **35**.

Viguierella coeca in a German swimming bath, KLIE **169**.—*V. chappuisi* **sp. n.** Surinam, DELACHAUX Zool. Anz. **59** p. 12 fig. 7. *V.* sp. not subterranean in habit in Java & Aru Is. MENZEL **206a**.

Wolterstorffia confluens in Poland, structure etc. pl. 8, MINKIEWICZ **211**.

BRANCHIURA.

Argulus zei **sp. n.** on *Zeus*, Cape Blanco N.W. Afr. p. 59 2 figs., BRIAN **42**.—*A. paulensis* **sp. n.** Brazil p. 4 figs., *A. nobilis* development and addt. descript. p. 2 figs., WILSON P.U.S.N. Mus. **64** art. 17.

OSTRACODA.

Baltic Ostracods, HIRSCHMANN **142**.

Ostracods of the Moscow Government, BRONSTEIN **46**.

Freshwater Ostracods S.E. Russia, KLIE **168**.

Ostracods of Cape Prov. S. Africa described and figured, SARS **269**.

Ostracods of the Cape Peninsula, S. Africa, MÜLLER, **223**.

Ostracods of S.W. Africa Protectorate, SARS **270**.

Ostracods of the Terra Nova Antarctic Expedition (pub. 1921) with figures of many of the species obtained, BARNEY **25**.

The Ostracods of the plankton of W. Greenland coasts p. 132, JESPERSEN **154**.

Fossil Ostracods, classification and geological significance, MERRETT **207**.

Feeding habits of Ostracods, NAUMANN **225**.

Afrocypris **gen. n.** for *A. barnardi* **sp. n.** S.W. Afr., SARS Ann. S. Afr. Mus. **20** p. 206 18 figs.

Archiconchoecia mülleri p. 7 6 figs., *A. aurorae* p. 8 3 figs. New Zealand seas, BRADY Sc. Rep. Austral. Ant. Exped. **5** pt. 4.

Bradycypris **gen. n.** for type *Cypris intumescens* Brady, SARS Ann. S. Afr. Mus. **20** p. 145.

†*Bithocypris phaseolina B* ? *keyserensis*, *B. pergracilis* **spp. n.** p. 703 figs. and other species figured Silurian Maryland, ULRICH & BASSLER Maryland Geol. Surv.—*B. silicula*, note p. 3 CHAPMAN **60**.

Cyclocypris castanea **sp. n.** New Brunswick, KLUGH Trans. Canad. Inst. **14** p. 337 1 pl.

Cyprilla **gen. n.** p. 169 for *C. arcuata* p. 170 11 figs., *C. gibbula* p. 171 4 figs., *C. deplexa* p. 172 7 figs., *C. humilis* p. 173 2 figs., *C. producta* p. 173 2 figs. **spp. n.** SARS Ann. S. Afr. Mus. **20**.

Cypridina, chemistry etc. of luminescence, HARVEY **131**, AMBERSON **6**.—*C. hilgendorfii* luminescence studies, KANDA **158**.

Cypridopsis spinifera p. 159 2 figs., *C. elizabethae* p. 161 2 figs., *C. reniformis* p. 161 2 figs., *C. clavata* p. 162 2 figs., *C. tonsa* p. 162 2 figs., *C. ochracea* p. 163 2 figs., *C. hirsuta* p. 164 2 figs., *C. glabrata* p. 165 7 figs., *C. trigonella* p. 166 4 figs., *C. pyramidata* p. 166 2 figs., *C. striolata* p. 167 3 figs., *C. brevis* p. 167 2 figs., *C. tumidula* p. 168 4 figs., *C. pymaea* p. 169 3 figs. **spp. n.** Cape Prov. SARS Ann. S. Afr. Mus. **20.**—*C. punctata* **sp. n.** S.W. Africa SARS Ann. S. Afr. Mus. **20** p. 205 3 figs.—*C. newtoni* **sp. n.** in the Tunisian Sahara addt. descript. figs., BREHM **41.**—*C. raciborskii* **sp. n.** Java GROCHMALICKI Bul. Intern. Acad. Krakow **1915 B** p. 234 fig. 15.

Cypria curvifurcata **sp. n.** Volga distr. Russia, KLIE Arb. Biol. Wolga-Station **7** p. 53 4 figs.

Cypris fuscata brain, HANSTRÖM, **129.**—*C. bispinosa* in Morocco and list of other occurrences, KLIE **170.**—*C. magnifica* **sp. n.** freshwater Java, BREHM Treubia **3** p. 222 3 figs.—*C. wierzejskii* **sp. n.** Java GROCHMALICKI Bul. Intern. Acad. Krakow **1915** B p. 232 fig. 14.—*C.* (*Eucypris*) *acuta* **sp. n.** nr. Cape Town, MÜLLER Deutsche Südpolar Exped. Zool. **8** p. 70 fig. 1.

†*Cythere chubbiana* fig. 3, *C. umzambaensis* fig. 8 p. 4 Cretaceous Pondoland **spp. n.** *C. harrisiana* var. *reticosa* p. 3 fig. 7, CHAPMAN Trans. Geol. Soc. S. Afr. **26.**

†*Cythereis lonsdaleiana* var. *africana* **var. n.** Cretaceous Pondoland p. 5, fig. 4, *C. quadrilatera* fig. 5, *C. ornatissima* var *reticulata* fig. 6, *C. o.* var. *nuda* fig. 11, CHAPMAN Trans. Geol. Soc. S. Afr. **26.**

†*Cytherella plowsiana* **sp. n.** Cretaceous Pondoland, CHAPMAN Trans. Geol. Soc. S. Africa **26** p. 6 fig. 9.

Cytheridella capensis **sp. n.** nr. Cape Town, MÜLLER Deutsche Südpolar Exped. Zoöl. **8** p. 77 5 figs.

Darwinula malayica **sp. n.** in moss, Java, MENZEL Treubia **3** p. 196 4 figs.

Eucypris purcelli p. 108 3 figs., *E. producta* p. 109 2 figs., *E. hirta* p. 110 2 figs. **spp. n.** Cape Prov. SARS Ann. S. Afr. Mus. **20.**

Gomphocythere **gen. n.** for *Limnicythere obstusata* Sars p. 174 16 figs. also *G. expansa* **sp. n.** p. 176 6 figs., SARS Ann. S. Afr. Mus. **20.**

Herpetocypris oblonga p. 201 4 figs., *H. ovularis* p. 201 8 figs. **spp. n.** S.W. Afr., SARS Ann. S. Afr. Mus. **20.**

Homocypris **gen. n.** for *H. conoidea*, **sp. n.** nr. Cape Town, SARS Ann. S. Afr. Mus. **20** p. 119 11 figs.

Isocypris nivea **sp. n.** nr. Cape Town, SARS Ann. S. Afr. Mus. **20** p. 140 13 figs.

†*Leperditia phaseolus* in Gotland affinities 3 figs., HEDSTRÖM **135.**

Liocypris **gen. n.** for *L. grandis* **sp. n.** Cape Province, SARS Ann. S. Afr. Mus. **20** p. 114 12 figs.

Megalocypris hispida p. 137 7 figs., *M. tuberculata* p. 138 6 figs. **spp. n.**, SARS Ann. S. Afr. Mus. **20.**—*M. brevis* **sp. n.** S.W. Africa, SARS Ann. S. Afr. Mus. **20** p. 203 8 figs.

†*Octonaria cranei*, *O. muricata* p. 701 figs. **spp. n.** Silurian Maryland, ULRICH & BASSLER Maryland Geol. Surv.

Palmenella **gen. n.** for *Cythere limicola* Norman with diagnosis in Latin and many figures of the species, HIRSCHMANN Ann. Mus. Zool. Petrograd **20** 1915 p. 580 figs. 8–27.

Paracypretta **gen. n.** p. 152 for *P. ampullacea* **sp. n.** p. 153 13 figs., also *P. rubra*, *P. acanthifera* p. 154 4 figs. **spp. n.** all near Cape Town, SARS Ann. S. Afr. Mus. **20.**

Pionocypris intermedia **sp. n.** near Cape Town, SARS Ann. S. Afr. Mus. **20** p. 156 2 figs.

Pseudocypris testudo **sp. n.** near Cape Town p. 113 7 figs., *P. triquetra* p. 178 15 figs., *P. expansa* p. 179 2 figs. **spp. n.** near Kimberley, SARS Ann. S. Afr. Mus. **20.**—*P. gibbera* p. 196 17 figs., *P. circularis* p. 197 5 figs. **spp. n.** S.W. Africa, SARS Ann. S. Afr. Mus. **20.**

Sclerocypris **gen. n.** for *S. clavularis* **sp. n.** near Kimberley, SARS Ann. S. Afr. Mus. **20** p. 131 13 figs.—*S. exserta* p. 198 9 figs., *S. major* p. 199 7 figs., *S. superba* p. 200 5 figs. **spp. n.** S.W. Africa, SARS Ann. S. Afr. Mus. **20.**

Stenocypris hodgsoni p. 124 12 figs., *S. olivacea* p. 125 6 figs., *S. smaragdina* p. 126 6 figs., *S. pardalis* p. 127 2 figs., *S. pectinata* p. 129 4 figs., *S. declivis* p. 129 3 figs. **sp. n.** Cape Prov., SARS Ann. S. Afr. Mus. **20**.—*S. fascigera* **sp. n.** S.W. Africa, SARS Ann. S. Afr. Mus. **20** p. 202 6 figs.—*S. bispinosa* **sp. n.** near Cape Town, MÜLLER Deutsche Südpolar Exped. Zool. **8** p. 72 fig. 2.—*S. malcolmsoni* in moss tussocks in Java p. 193 figs., MENZEL **206**.

†*Vogdesella* **gen. n.** for *Jonesella obscura* Ulr., BAKER Proc. Cal. Acad. Sci. **13** 1924 p. 187.

Zonocypris cordata **sp. n.** near Cape Town, SARS Ann. S. Afr. Mus. **20** p. 150 **11** figs.

CIRRIPEDIA.

A systematic review of the Norwegian Cirripedia thoracica 2 pls. 35 textfigs., BROCH, **45**.

Parasitic Cirripedes of the coasts of Morocco, BROCH, **43**.

Cirripedes of the western coast of Africa, BROCH **44**.

A review of the Cirripedes of the S. African coasts, BARNARD **21**.

List of corallicolous Cirripedes from Mergui Archipelago, ANNANDALE **7**.

The phylogeny of the Cirripedia and the relationships of *Eobalanus*, WITHERS **331**.

Acasta sulcata anchoris **var. n.** Natal Coast p. 81 fig. 16, *A. alba* p. 83, *A. fossata* p. 84, *A. membranacea* p. 88 **spp. n.** S. Afr. coasts, BARNARD Ann. S. Afr. Mus. **20**.

Balanus eburneus growth on submerged metallic plates, PARKER **236**.—*B. cariosus* variability on Bt. Columbian coasts with notes on other species, CORNWALL **77**.—*B. elizabethae* **sp. n.** Zwartkops river (tidal) S. Africa, BARNARD Ann. S. Afr. Mus. **20** p. 72.—*B. fujiyama* **sp. n.** p. 62 3 figs., *B. terebratus radicifer* **var. n.** p. 63 3 figs. on corals Mergui, ANNANDALE Mem. Ind. Mus. **8**.

†*Balanus concavus eseptatus* p. 1 figs., *B. polyporus* p. 2 fig. Miocene Haiti, PILSBRY P. U. S. N. Mus. **65** art. 2.—*B.* (*Megabalanus*) *tubulatus* L. Pliocene p. 28 figs., *B.* (*Chirona*) *zelandicus* Miocene p. 35 figs. **spp. n.** *B.* (*Balanus*) *amphitrite acutus* **var. n.** Miocene p. 30 and other New Zealand fossil species described and figured, all New Zealand, WITHERS Palaeont. Bul. **10**.

†*Calantica* (*Calantica*) *arguta* **sp. n.** Miocene N. Zealand p. 6 figs., *C.* (*C.*) *subplana* p. 5 figs., WITHERS Palaeont. Bul. **10**.—*C.* (*Scillaelepas*) *ginginensis* (Etheridge) redescribed and figured, WITHERS **332**.

†*Eobalanus* **gen. n.** p. 93 for type *E. informans* **sp. n.** also *E. trentonensis* **sp. n.** Ordovician New York with notes on phylogeny, RUEDEMANN New York State Mus. Bul. No. **251**.

Heteralepas (*Paralepas*) *palinuri* **sp. n.** Mozambique coast, BARNARD Ann. S. Afr. Mus. **20** p. 62.

†*Hexelasma aucklandicum* and other doubtful species from New Zealand discussed and figured p. 18 many figs., WITHERS **333**.

Octolasmis lowei structure and development, BROCH **43**.

Pyrgoma indicum **sp. n.** p. 64 7 figs. with *P. i. merulinae* and *P. i. symphylliae* **phases n.** p. 65, *P. crenatum tridacophylliae* **phase n.** p. 66 13 figs. all on corals Mergui, ANNANDALE Mem. Ind. Mus. **8**.

Scalpellum larval stages and life history p. 2, *S. faurei* p. 22 fig. 4, *S. cancellatum* p. 24 fig. 5, *S. subalatum* p. 25 fig. 6, *S. capense* p. 26 fig. 7, *S. agulhense* p. 28 fig. 8, *S. porcellanum* p. 31 fig. 9, *S. brevicaulis* p. 32 pl. 11, *S. eumitos* p. 34 fig. 12, *S. uncinatum* p. 38 fig. 13, *S. natalense* p. 39 fig. 14, *S. botellinae* p. 44 fig. 15, all coasts of S. Africa, BARNARD Ann. S. Afr. Mus. **20**.

†*Scalpellum* (*Arcoscalpellum*) *euglyphum* p. 11 figs., *S.* (*A.*) *striatulum* p. 12 figs., *S.* (*A.*) *complanatum* p. 13 figs. **spp. n.** Miocene N. Zealand, WITHERS Palaeont. Bul. **10**.

Smilium hypocrites **sp. n.** Zululand coasts, BARNARD Ann. S. Afr. Mus. **20** p. 14 figs. 1, 2.

X. ARACHNIDA

TO WHICH ARE ADDED

ARTHROPOD GROUPS

OTHER THAN

INSECTA AND CRUSTACEA.

[GIGANTOSTRACA (XIPHOSURA, EURYPTERIDA, TRILOBITA), PANTOPODA, TARDIGRADA, PENTASTOMIDA, MYRIOPODA, AND PROTOTRACHEATA.]

ARRANGED BY

W. L. SCLATER, M.A.

CONTENTS.

	PAGE
I. TITLES (All groups)	2
II. SUBJECT-INDEX :—	
Gigantostraca	12
Pantopoda	12
Arachnida (incl. Tardigrada and Pentastomida)	12
Myriopoda	14
Prototracheata	14
III. SYSTEMATIC INDEX :—	
Gigantostraca	15
Pantopoda	17
Arachnida (incl. Tardigrada and Pentastomida)	17
Myriopoda	37
Prototracheata	39

I.—TITLES (All Groups).

1.—Abraham, H. C. Some Mygalomorph Spiders from the Malay Peninsula. Proc. Zool. Soc. London **1924** pp. 1091–1124 6 pls. 3 text-figs.

2.—Abraham, H. C. Notes on the habits of the Spider, *Cryptothele sundaica* Thorell pp. 90–91. An interesting Singapore Spider pp. 91–92. Singapore Nat. **4** 1924.

3.—André, M. Note sur ce qu'on appelle "rostre" chez les Acariens. Bul. Muséum Paris **1924** pp. 135–136 fig.

4.—André, M. Acariens recuillis en Tunisie (Le Kef) par M. le Dr. Larrousse dans des terriers de petits Rongeurs. Bul. Muséum Paris **1923** pp. 506–508; **1924** pp. 272–278 4 figs.

5.—André, M. Une forme asiatique nouvelle de Trombidion. Bul. Muséum Paris **1924** pp. 368–369.

6.—Anon. Eight generic names in Acarina placed on the official list of generic names: in Opinions rendered by the International Commission on Zoological Nomenclature. Smithson. Misc. Coll. **73** 1922 pp. 23–31 [Opinion no. 73].

7.—Archey, G. The genus *Cryptops* (Chilopoda) in New Zealand. Rec. Canterbury Mus. Christchurch N. Z. **2** 1924 pp. 203–220 4 pls.

8.—Baerg, W. J. The effect of the venom of some supposedly poisonous Arthropods [Centepedes and Scorpions]. J. Ent. Soc. Amer. Columbus Ohio **17** 1924 pp. 343–352 7 figs.

9.—Bagnall, R. S. The Symphila of Northumberland and Durham. Vasculum Hexham **9** 1923 pp. 65–73.

10.—Banks, N. Arachnida of the Williams Galapagos Expedition. Zoologica New York **5** 1924 pp. 93–99 4 figs.

11.—Becker, E. Zur morphologischen Bedeutung der Pleuren bei Ateloceraten. Zool. Anz. Leipzig **60** 1924 pp. 169–185 6 figs.

12.—Bedford, G. A. H. Description of an abnormal female Blue Tick (*Boophilus decoloratus* Koch). S. Afric. J. Nat. Hist. Pretoria **4** 1924 pp. 353–355 1 fig.

13.—Berland, L. Araignées de la Nouvelle-Calédonie et des Iles Loyalty: in Sarasin and Roux "Nova Caledonia" A. Zool. **3** livr. 2 1924 pp. 159–255 212 figs.

14.—Berland, L. Les Araignées de Tatihou (Manche). Ann. Sci. Nat. (Zool.) Paris (10) **7** 1924 pp. 335–336.

15.—Berland, L. Sur deux Araignées du littoral de la Manche. Bul. Soc. Ent. Paris **1924** p. 83.

16.—Bhatia, M. L. The nervous system of *Scolopendra morsitans*. Proc. Lahore Phil. Soc. **3** pp. 15–17; see also pp. 40–46.

17.—Bhattacharya, D. R. and **Gatenby,** J. B. Spermatogenesis in an Indian Scorpion. Nature London **113** 1924 p. 858 1 fig.

18.—Birula, A. Ueber *Galeodes truculentus* Pocock. Zool. Anz. Leipzig **61** 1924 pp. 227–235 4 figs.

19.—Bishop, S. C. A new Spider from Isle-au-Haut, Maine. New York State Mus. Bul. Albany no. **251** 1924 appendix p. 26 4 figs.

20.—Bishop, S. C. A revision of the Pisauridae of the United States (with special reference to the New York species). New York State Mus. Bul. Albany no. **252** 1924 pp. 1–140 37 pls. 2 text-figs.

21.—Bishop, S. C. and **Crossby,** C. R. A fossil species of *Caddo* (Opiliones) from the Baltic amber, and its living relatives. New York State Mus. Bul. no. **253** 1924 pp. 83–84 1 pl.

Bishop, S. C. *vide* Crosby.

Blanchard, K. C. *vide* Loeb.

22.—Blacklock, B. Craw-Craw in Sierra Leone. Ann. Trop. Med. Liverpool **18** 1924 pp. 253–260 2 pls.

23.—Blanc, G. et **Caminopetros,** J. La Tick paralysis observée sur les moutons de la région de Sitia (Crète). Bul. soc. path. exot. Paris **17** 1924 pp. 378–381.

24.—Bolivar y **Pieltain,** C. Estudios sobre *Obisium* (Pseudosc.) cavernicolas de la región vasca. Bol. Soc. Esp. Nat. Hist. Madrid **24** 1924 pp. 101–104 2 figs.

25.—Bonnet, A Révision des genres *Megninia, Mesalges* et genres voisins de la sous-famille des Sarcoptides Plumicoles. Bul. Soc. zool. Paris **49** 1924 pp. 146–188, 190–218, 394–398, 94 figs.

26.—Bonnet, P. Sur l'accouplement de *Dolomedes fimbriatus* Cl. (Aranéides). C.R. Soc. Biol. Paris **91** 1924 pp. 437–438.

27.—Bonnet, P. Sur la nature des aliments que les Araignées peuvent absorber et sur le sens du goût chez ses animaux. C.R. Soc. Biol. Paris **91** 1924 pp. 1194–1196.

28.—Branson, E. B., **Tansey,** V. O. and **Stewart,** G. A. The Devonian of Missouri. Missouri Bur. Geol. Rolla (2) **17** 1922 pp. 1–279 71 pls.

29.—Bristowe, W. S. A Bee-eating Dragonfly and a Spider-eating Asilid Fly. Ent. Mag. London **60** 1924 pp. 150–151.

30.—Brolemann, H. W. Myriapodes du Grand Atlas Marocain. Racolte de M. Alluaud au Djebeb Tachdirt en juin et juillet 1923. Bul. Soc. Sci. Maroc Rabat **4** 1924 pp. 184–197 8 figs.

31.—Brolemann, H. W. Myriapodes recueillis au Soudan par M. Mimeur, chargé d'études entomologiques en Afrique Occidentale Française. Bul. Soc. Zool. France Paris **49** 1924 pp. 307–319 9 figs.

32.—Brumpt, E. Particularités evolutives de l'*Amblyomma agamum.* Ann. Parasitol. Paris **2** 1924 pp. 113–120 3 figs.

33.—Butler, S. Spiders. Vict. Nat. Melbourne **40** 1924 pp. 170–179 1 pl.

34.—Buxton, B. H. Notes on the internal anatomy of *Liphistius batuensis* Abr. J. Malayan Branch R. Asiat. Soc. Singapore **2** 1924 pp. 85–86.

35.—Cameron, A. E. *Sarcoptes* of Cattle. Parasitology Cambridge **16** 1924 pp. 255–265 6 figs.

Caminopetros, K. *vide* Blanc.

36.—Caporiacco, L. di. Una nuova specie di Chernetide Italiano. Boll. Soc. Ent. Ital. Genova **55** 1923 pp. 131–134.

37.—Caporiacco, L. di. Saggio sulla fauna aracnologica della Carnia e regioni limitrofe. Mem. Soc. ent. ital. Genova **1** 1922 pp. 60–111 4 figs.

38.—Caporiacco, L. di. Aracnidi dei dintorni di Firenze. Mem. Soc. Ent. Ital. Genova **2** 1923 pp. 177–226.

39.—Carbonell, J. J. Contribución al estudio de las terafosas argentinas. Physis Buenos Aires **7** 1924 pp. 184–189.

40.—Carl, J. Les Diplopodes de la Nouvelle-Calédonie et des Iles Loyalty. C.R. Soc. Phys. Hist. Nat. Genève **41** 1924 pp. 67–76.

41.—Chamberlin, J. C. Preliminary note upon the Pseudoscorpions as a venomous order of the Arachnida. Ent. News Philadelphia **35** pp. 205–239 4 figs.

42.—Chamberlin, J. C. Giant *Garypus* of the Gulf of California. Nature Mag. Sept. **1924** pp. 171–175 6 figs.

43.—Chamberlin, J. C. The Cheiridiinae of North America. (Arachnida-Pseudoscorpionida). Pan-Pacific Entomol. San Francisco **1** 1924 pp. 32–40 figs.

44.—Chamberlin, J. C. *Hesperochernes laurae,* a new species of False-Scorpion from California inhabiting the nest of *Vespa.* Pan-Pacific Entom. San Francisco **1** 1924 pp. 89–92 1 fig.

45.—Chamberlin, J. C. On two species of Pseudoscorpion from Chile with a note on one from Sumatra. Rev. Chilena Santiago **27** 1924 pp. 185–192 2 fig.

46.—Chamberlin, R. V. A new Milliped of the genus *Orthomorpha,* immigrant from the Philippine Islands. Ent. News Philadelphia **35** 1924 pp. 173–174 fig.

47.—Chamberlin, R. V. A new Leptodesmoid Milliped from Nicaragua. Ent. News Philadelphia **35** 1924 p. 174.

48.—Chamberlin, R. V. The Spider fauna of the shores and islands of the Gulf of California. Proc. Cal. Acad. Sci. San Francisco **12** 1924 pp. 561–694 140 text-figs.

49.—Chamberlin, R. V. Descriptions of new American and Chinese Spiders, with notes on other Chinese species. Proc. U. S. Nat. Mus. Washington **63** art. 13 1924 pp. 1–38 7 pls.

50.—Chamberlin, R. V. Chilopods of the Williams Galapagos Expedition. Zoologica New York **5** 1924 pp. 137–141 4 figs.

51.—Chamberlin, R. V. On Four Temitophilous Millipeds from British Guiana. Zoologica New York **3** 1923 pp. 411–421 3 pls.

52.—Chamberlin, R. V. and **Robinson,** E. G. The northern range of the Scorpion. Science New York **59** 1924 p. 64.

53.—Chodziesner, M. Beiträge zur Kenntnis der Zecken mit besonderer Berücksichtigung der Gattung *Hyalomma* Koch. Zool. Jahrb. Jena Abt. Syst. **47** 1924 pp. 505–572 7 pls. 46 text-figs.

54.—Chyzer, C., **Daday de Deès,** E. **Kulczyński,** L., **Jablonowski,** J. Arachnoidea in: Fauna Regni Hungariae ed. R. Soc. Sci. Nat. Hung. pp. 2 + 4 + 34 + 10. Budapest 1918 l. 8vo. [Magyar and Latin].

55.—Clarke, J. M. A Hemiaspidan Crustacean from the New York Silurian Waterlimes. New York State Mus. Bul. Albany no. **251** 1924 pp. 119–120 2 figs.

56.—Cockerell, T. D. A. The Spiders of the Madeira Islands. Nature London **114** 1924 p. 11.

57.—Cockerell, T. D. A. The name of the Spotted Fever Tick. Science New York **59** 1924 p. 277.

58.—Cook, O. F. and **Loomis,** H. F. A Dragon Milliped in China. An extreme type showing that evolution is not limited to useful characters. J. Heredity Baltimore **15** 1924 pp. 51–53 2 figs.

59.—Cook, O. F. and **Loomis,** H. F. A new family of spined Millipeds from Central China. J. Washington Acad. Sci. **14** 1924 pp. 103–108 2 figs.

Cook, O. F. *vide* Thuringer.

60.—Cotte, J. Les Cécidies des Alpes Maritimes. Mem. Soc. Linn. Provence Marseille no. **3** 1924 pp. 1–56 6 pls.

61.—Crosby, C. R. and **Bishop,** S. C. The genus *Cryptobunus* Banks (Phalangida). Ent. News Philadelphia **35** 1924 p. 104.

62.—Crosby, C. R. and **Bishop,** S. C. Notes on the Opiliones of the Southeastern United States, with descriptions of new species. J. Elisha Mitchell Sci. Soc. Chapel Hill N. C. **40** 1924 pp. 8–26 3 pls.

Crossby, C. R. *vide* Bishop.

63.—Crozier, W. J. On the critical thermal increment for the locomotion of a Diplopod. J. Gen. Physiol. Baltimore **7** 1924 pp. 123–136.

64.—Daday de Deés, E. Myriapoda in: Fauna Regni Hungariae ed. R. Soc. Sci. Nat. Hung. pp. 5–11 Budapest 1918 l. 8vo. [Magyar and Latin].

Daday de Deés, E. *vide* Chyzer.

65.—Dampf, A. Zur Kenntnis der Estländischen Moorfauna (II. Beitrag) Sitzungsber. Naturf.-Ges. Univ. Dorpat **31** 1924 pp. 17–71 10 figs. Oribatiden von M. Sellnick pp. 65–70.

66.—Demanet, F. Le Waulsortien de Sosoye et ses rapports faunistiques avec le Waulsortien d'age Tournaisien Supérieur. Mem. Inst. Geol. Univ. Louvain **2** 1923 pp. 37–285 12 pls.

67.—Dias, E., **Libanio,** S. e **Lisbóa,** M. Lucta contra os Escorpiões. Mem. Inst. Oswaldo Cruz Rio de Janeiro **17** 1924 pp. 5–44 1 pl. [Portuguese and English].

68.—Diener, C. Eurypterida: in Fossilium Catalogus I. Animalia. Pars 25. Pp. 1–31 Berlin (Junk) 1924 8vo.

69.—Drenski, P. St. Le venin des araignées et leur action sur l'organisme animal. Trav. Soc. Bulg. Sci. Nat. Sophia no. **7** 1915 pp. 152–159 [Bulgar with French rés.].

70.—Dubost, G. Sur les nids que construisent les Polydesmes (Myriapodes). C. R. Soc. Biol. Paris **91** 1924 pp. 155–157.

71.—Emerton, J. H. Recent collections of Canadian Spiders. Ent. News Philadelphia **56** 1924 pp. 122–124

72.—Emerton, J. H. New California Spiders. Pan-Pacific Entomol. San Francisco **1** 1924 pp. 29–31 9 figs.

73.—Emerton, J. H. New Spiders from southern New England. Psyche Boston **31** 1924 pp. 140–145 6 figs.

74.—Ewing, H. E. Ectoparasites of some Polynesian and Malaysian rats of the genus *Rattus*. Bul. Bern. P. Bish. Mus. Honolulu **14** 1924 pp. 7–11 1 fig. 1 map.

75.—Ewing, H. E. New Tarsonemid Mites (Order Acarina, Family Tarsonemidae). Proc. Ent. Soc. Washington **26** 1924 pp. 66–69.

76.—Ewing, H. E. A new Mite from the lung sac of a Rattle-snake. Proc. Ent. Soc. Washington **26** 1924 p. 179.

77.—Ewing, H. E. The Dermanyssid Mites of North America. Proc. U. S. Nat. Mus. Washington **62** Art. 13 1922 pp. 1–26 7 text-figs. 2 pls.

78.—Fage, L. Eugène Simon. Bul. Soc. Zool. Paris **49** 1924 pp. 550–554.

79.—Fage, L. Araneids from the Siju cave, Garo hills, Assam. Rec. Ind. Mus. Calcutta **26** 1924 pp. 63–67 2 figs.

80.—Falconer, W. Plant Galls of the Llangollen district. Lancs. Ches. Nat. Darwen **16** 1924 pp. 121–123.

81.—Falconer, W. *Macrocheles submotus*. New name for *M. cognatus* Falcr. (nom. praeoc.). Naturalist London **1924** p. 363.

82.—Ferguson, E. W. Australian Ticks : in Rep. Public Health N.S.W. for **1923** 1924 pp. 147–157.

83.—Funkquist, H. P. A. Asaphus regionens omfattning in Sydöstra Skåne och pa Bornholm. Act. Univ. Lund (2) **16** 1920 no. 1 pp. 1–58 8 plans 2 pls. [Swedish with English summary].

84.—Gajewska, H. Über die Nukleolisation des Keimbläschens und des Ooplasma der wachsenden Eier von *Lithobius*. Bul. Intern. Acad. Krakow **1919B** 1920 pp. 320–322.

85.—Garrey, W. E. The relation of respiration to rhythm in the cardiac ganglion of *Limulus polyphemus*. J. Gen. Physiol. New York **4** 1921 pp. 149–156 1 fig.

86.—Gatenby, J. B. The Scorpion Spermateleosis. Nature London **114** 1924 pp. 380–381 1 fig.

Gatenby, J. B. *vide* Bhattacharya.

Gatenby J. B. *vide* Samman.

87.—Gerhardt, U. Weitere Studien über die Biologie der Spinnen. Arch. Natg. Berlin **90** Abt. A Hft. 5 1924 pp. 85–192 10 text-figs.

88.—Gerhardt, U. Ueber das Sinnesleben und die Plastizität der Instinkte bei Spinnen. Verh. D. Zool. Ges. Berlin **29** 1924 pp. 64–69 1 fig.

89.—Gerhardt, U. Neue Studien zur Sexualbiologie und zur Bedeutung des sexuellen Grössendimorphismus der Spinnen. Zs. Morph. Ökol. Berlin **1** 1924 pp. 507–538 7 figs.

90.—Gill, E. L. Fossil Arthropods from the Tyne coalfield. Geol. Mag. London **61** 1924 pp. 455–471 7 figs.

91.—Giltay, L. Note sur un stade postembryonnaire d'*Euscorpius carpathicus* (L.). Bull. Soc. ent. Belg. Brussels **6** 1924 pp. 55–56.

92.—Glauert, L. Contributions to the fauna of Western Australia no. 5. Arachnida. J. R. Soc. W. Austral. Perth **10** 1924 pp. 63–64.

93.—Gravely, F. H. Tartarides from the Siju cave, Garo hills, Assam. Rec. Ind. Mus. Calcutta **26** 1924 pp. 61–62 1 fig.

94.—Gravely, F. H. Some Indian Spiders of the Family Lycosidae. Rec. Ind. Mus. Calcutta **26** 1924 pp. 587–613 5 figs.

95.—Gurney, W. B. Mite of genus *Eriophyes* associated with malformation of leaves of *Eucalyptus stricta*. Proc. Linn. Soc. N.S. Wales Sydney **49** 1924 pp. 395–396 1 fig.

96.—Haffner, K. v. Beiträge zur Kenntnis der Linguatuliden. iii. Ueber den Hoden und die Spermatocystenbildung von *Porocephalus monoliformis* **58** pp. 285–290 9 figs. iv. Die Körpermuskulatur von *Porocephalus moniliformis* **59** pp. 270–276 6 figs. v. Die Drüsen von *Porocephalus armillatus* **60** pp. 126–136 13 figs. vi. Ueber das Nervensystem von *Porocephalus armillatus* **61** pp. 183–186 4 figs. vii. Die systematische Stellung der Linguatuliden **61** pp. 209–218 1 fig. Zool. Anz. Leipzig 1924.

97.—**Harrison,** J. W. H. Sex in the Salicaceae and its modification by Eriophyid Mites and other influences. Brit. J. Exper. Biol. Edinburgh **1** 1924 pp. 445–472 4 figs.

98.—**Hayasaka,** I. Some Permian fossils from Kitakami Mountain. Japan. J. Geol. Geogr. **2** 1923 pp. 107–116 1 pl. [Trilobita p. 113].

99.—**Hett,** M. L. On the family Linguatulidae. Proc. Zool. Soc. London **1924** pp. 107–159 13 text-figs.

100.—**Hett,** M. L. Zoological results of the Third Tanganyika Expedition, conducted by Dr. W. A. Cunnington 1904–1905.—Report on the Linguatulidae. Proc. Zool. Soc. London **1924** p. 161 1 text-fig.

101.—**Hirst,** S. On a new Mite of the genus *Chorioptes* parasitic on Goats in the United States. Ann. Mag. N. H. London (9) **13** 1924 p. 538.

102.—**Hirst,** S. On some new species of Red Spider. Ann. Mag. N. H. London (9) **14** 1924 pp. 522–527 2 pls.

103.—**Hirst,** S. Note on the synonymy and distribution of *Tetranychus telarius* L. Ann. Mag. N. H. London (9) **14** 1924 pp. 621–624.

104.—**Hirst,** S. On three new Acari belonging to the Superfamily Trombidioidea (Erythraeidae and Teneriffiolidae). Proc. Zool. Soc. London **1924** pp. 1075–1080 4 figs.

105.—**Hoof,** L. van. Conservation du pouvoir infectieux de l'*Ornithodorus moubata* nourri sur Reptiles et Sauriens. Bul. soc. path. exot. Paris **17** 1924 pp. 376–378.

106.—**Horst,** R. *Paraperipatus keiensis* n. sp. Videns. Medd. nat. For. Kjøbenhavn **76** 1923 pp. 119–121 3 figs.

107.—**Hovasse,** R. Une coaptation chez le Scorpion noir (*Euscorpius flavicaudis* de Geer). Ann. Soc. Linn. Lyon **70** 1924 pp. 180–185 3 figs.

108.—**Ingram,** A. *Ornithodorus moubata* Murray, in relation to Relapsing Fever in the Gold Coast. Ann. Trop. Med. Liverpool **18** 1924 pp. 95–97.

Jablonowski, J. *vide* Chyzer.

109.—**Jackson,** A. R. On the Spiders of Spitsbergen. Results of the Merton College Expedition to Spitsbergen in 1923.—No. 1. Ann. Mag. N. H. London (9) **13** 1924 pp. 77–79.

110.—**Jackson,** A. R. On new and rare British Spiders. Proc. Dorset N. H. Field Cl. **45** 1924 pp. 101–120.

111.—**Jacob,** E. Die Verwandtschaftsbeziehungen der Zeckengattungen. Versuch eines natürlichen Systems auf vergleichendmorphologischer Grundlage. Parasitology Cambridge **16** 1924 pp. 313–316.

112.—**Jakob,** E. Die Verwandtschaft der Zeckengattungen. Versuch eines naturliches Systems auf vergleichendmorphologischen Grundlage. Zs. Morph. Ökol. Berlin **1** 1924 pp. 309–372 24 figs.

113.—**Jacot,** A. P. Oribatoidea sinensis III. J. N. China As. Soc. Shanghai **55** 1924 pp. 78–83 13 figs.

114.—**Jacot,** A. P. A new Oribatid Mite: *Galumna samoëensis* sp. n. Trans. Amer. Micros. Soc. Menasha Wis. **43** 1924 pp. 85–89 figs.

115–116.—**Jacot,** A. P. Oribatid Mites: *Euphthiracarus depressculus* sp. n. and *Euphthiracarus* (Ewing). Trans. Amer. Micros. Soc. Menasha Wis. **43** 1924 pp. 90–96 figs.

117.—**Joseph,** C. Moeurs des Araignées Chiliennes. Rev. Chilena Santiago **25** 1923 pp. 141–147.

118.—**Joyeux,** C. Sur un cas de Gale Norvégienne en Afrique Occidentale. Ann. Parasitol. Paris **1** 1923 pp. 167–169.

119.—**Kästner,** A. Beiträge zur Kenntnis der Lokomotion der Arachniden. Arch. Natg. Berlin **90** Abt. A Hft. 5 1924 pp. 1–19 15 figs.

120.—**Kastner,** A. Die vergleichendanatomische Bedeutung der Interpulmonarfalte der Araneen. Zool. Anz. Leipzig **58** 1924 pp. 97–102 4 figs.

121.—**King,** S. D. Oogenesis of *Lithobius*. Nature London **114** 1924 p. 52; also V. **Nath** p. 159.

122.—**King,** S. D. Oogenesis in *Lithobius forficatus*. Sci. Proc. R. Dublin Soc. **18** 1924 pp. 29–36 2 pls.

123.—**King** W. B. R. Rare Trilobites from the Carboniferous Limestone. Naturalist London **1924** pp. 361–363 fig.

124.—Kopstein, P. F. Liste der Scorpione des Indo-Australischen Archipels in Museum zu Buitenzorg. Treubia Batavia **3** 1923 pp. 184–187.

125.—Kulczyński, V. Fragmenta arachnologica x. Bul. Acad. Sci. Krakov for **1914B** 1915 pp. 897–942.

Kulczyński, L. *vide* Chyzer.

126.—Larrouse, F. Presence au Kef (Tunisie) d'une nouvelle espèce du genre *Ornithodoros* : *O. normandi* n. sp. Ann. Parasitol. Paris **1** 1923 pp. 170–177 4 figs.

Leitão *vide* Mello-Leitão.

127.—Lévy, R. Sur le mécanisme de l'hémolyse par le venin de Scorpion. Comparaison avec d'autres venins. C.R. Acad. Sci. Paris **179** 1924 pp. 1093–1095.

Libanio, S. *vide* Dias.

Lisboa, M. *vide* Dias.

128.—Loeb, L. and **Blanchard,** K. C. Vital staining of amoebocyte tissue in *Limulus*. Biol. Bul. Wood's Hole Mass **47** 1924 pp. 284–297.

129.—Loman, J. C. C. Les affinités des Pycnogonides. Ann. Sci. Nat. (Zool.) Paris (10) **7** 1924 pp. 309–333 13 text-figs.

Loomis, H. F. *vide* Cook.

130.—Lundblad, O. Neue Hydracarinen aus Schweden. Ent. Tidskr. Stockholm **45** 1924 pp. 67–72 1 fig., pp. 178–181 14 figs.

131.—Lundblad, O. Ein unerwatetes, interessantes Verhältnis in der Epimorphose einer schwedischen *Hexalebertia*. Ent. Tidskr. Stockholm **45** 1924 pp. 72–77 5 figs.

132.—McLearn, F. H. Palaeontology of the Silurian Rocks of Arisaig, Nova Scotia. Mem. Geol. Surv. Canada **137** (Geol. Ser. 118) 1924 pp. 1–180 30 plates. [Trilobites pp. 160–171.]

Macfie, J. W. C. *vide* Yorke.

133.—Mallock, A. The eyes of Spiders. Nature London **113** 1924 pp. 45–48 13 figs.

134.—Marshall, R. Water Mites of Alaska and the Canadian North-west. Trans. Amer. Miscros. Soc. Menasha Wis. **43** 1924 pp. 236–255 4 pls.

135.—Mello-Leitão. Quelques Arachnides nouveaux du Brésil. Ann. Soc. Ent. Paris **93** 1924 pp. 179–187.

136.—Mello-Leitão. Opiliones Laniatores do Brasil. Arch. Mus. Rio de Janeiro **24** 1923 pp. 107–197 34 figs.

137.—Mello-Leitão. Novo *Myrmecium* do Brasil. Bol. Soc. Entom. Brasil Rio de J. no. **5/6** 1924 pp. 11–12.

138.—Menozzi, C. Res Mutinenses. Scorpiones. Atti Soc. Nat. Mat. Modena **53-54** 1924 pp. 83–88.

139.—Menozzi, C. Mirmecofili raccolti a Sambiase di Calabria. Boll. Soc. Ent. Ital. Genova **55** 1923 pp. 72–74.

140-141.—Meya, J. de. The Common Ticks of Nyasaland with special notes on the anatomy and biology of Ticks in general. Bull. No. 1 Dept. Agric. Nyasaland Protect. Zomba 1918 pp. 1–32.

142.—Mitchell, J. New Trilobites from Bowning, with notes on *Encrinurus* and *Cordania gardneri*. Proc. Linn. Soc. N. S. Wales Sydney **49** 1924 pp. 46–54 1 pl.

143.—Monier, M. Observations sur les moeurs des Araignées comme contribution a l'étude des lois de l'évolution. Ann. Soc. Linn. Lyon **70** 1924 pp. 186–188.

144.—Müller, A. Zur Anatomie einiger Arten des Genus *Ischyropsalis* C. L. Koch nebst vergleichend-anatomischen Betrachtungen. Zool. Jahrb. Jena Abt. Anat. **45** 1924 pp. 405–518 5 pls. 1 text-fig.

145.—Müller, H. L. H. Untersuchungen zur Biologie der Diplopoden-1. Die Lichtreaktionen von *Julus fallax* und *Polydesmus complanatus*. Zool. Jahrb. Jena Abt. Allg. Zool. **40** 1924 pp. 399–488 1 pl. 36 text-figs.

146.—Nalepa, A. Die Systematik der Eriophyiden, ihre Aufgabe und Arbeitsmethoden. Nebst Bemerkungen über die Umbildung der Arten. Verh. Zool.-Bot. Ges. Wien **67** 1917 pp. 12–38.

147.—Nalepa, A. *Diptilomiopus*, eine neue Eriophyidengattung. Verh. Zool.-Bot. Ges. Wien **67** 1918 pp. 226–232.

148.—Nath, V. Cell inclusions in the gametogenesis of Scorpions. Nature London **114** 1924 p. 52.

149.—Nath, V. Oogenesis of *Lithobius forficatus.* Proc. Cambridge Phil. Soc. (Biol. Sci.) **1** 1924 pp. 148–157 pls. xii–xiii.

Nath, V. *vide* King.

150.—Navás, P. L. Quernets de la vall d'Aran (Lleyda) recollits pel Omà. Buttl. Inst. Catal. N. H. Barcelona (2) **4** 1924 p. 43.

151.—Nederström, P. Die bis jetzt aus Finnland bekannten Tardigraden. Acta Soc. Faun. Flora Finn. Helsingfors 8vo ser. **46** 1919 pp. 1–25.

152.—Obermeyer, H. Beiträge zur Kenntnis der Litoralfauna des Vierwaldstättersees. Rev. Hydrob. Aarau **2** 1922 pp. 3–105 [Acarina ; pp. 56–62].

153.—Oudemans, A. C. Analytical key for the classification of families and genera of *Diacrotricha* Oudms. 1906. (Acari). Ent. Ber. Helder **6** no. 135 1924 pp. 226–235.

154.—Oudemans, A. C. Acarologische Aanteekeningen lxxiv, lxxv, lxxvi, lxxvii. Ent. Ber. Helder **6** 1924 pp. 249–260, 265–274, 300–310, 317–336.

155.—Oudemans, A. C. Nieuwste ondersoekingen in de groep der Tyroglyphidae. Tijdschr. Ent. 's Gravenhage **67** 1924 pp. xii–xxviii.

Owen, O. *vide* Speyer.

156.—Pack-Beresford, D. R. Some new and rare Irish Spiders. Irish Nat. Dublin **33** 1924 pp. 49–54, 62–66.

157.—Pallary, P. Description de trois Scorpions nouveaux du Maroc. Arch. Inst. Pasteur Alger **2** 1924 pp. 219–222 1 pl.

158.—Patten, B. M. Photo reactions of partially blinded Whip-tail Scorpions. J. Gen. Physiol. New York **1** 1919 pp. 435–458 6 figs.

159.—Pavlovsky, E. N. Studies on the organization and development of Scorpions. Q. J. Micros. Sci. London **68** 1924 pp. 615–640.

160.—Pawlowsky, E. N. Skorpiotomische Mitteilungen. iii. Zur ausseren Morphologie der Skorpione pp. 473–492 1 pl. 3 text-figs. iv. Zur Morphologie der weiblichen Genetalorgane der Skorpione pp. 493–508 1 pl. 6 text-figs. Zool. kahrb. Jena Abt. Anat. **46** 1924.

161.—Perna, A. Upper Devonian Trilobites from the environs of the town Vierkhnie-Uralsk. Mém. Com. Géol. Petrograd livr. **138** 1915 pp. 1–58 [Russian and English rés.] 2 pls. 26 text-figs.

162.—Petrunkevitch, A. On families of Spiders. Ann. Acad. Sci. New York 29 1923 pp. 145–180 2 pls.

Pieltain, C. Bolivar y *vide* Bolivar.

163.—Poulsen, C. Bornholms Olenuslag og deres Fauna. Com. Paleont. Mus. Min. Geol. Univ. Copenhague no. **20** 1923 pp. 1–83 3 pls. [with English rés.].

Prouty, W. F. *vide* Swartz.

164.—Pruvost, P. Un Euryptéride nouveau du terrain houiller de Charleroi. Ann. soc. géol. Lille **48** 1924 pp. 143–151 1 pl.

165.—Randow, E. Zur Morphologie und Physiologie des Darmkanals der Juliden. Zs. wiss. Zool. Leipzig **122** 1924 pp. 534–582 21 figs.

166.—Rau, P. Some life history notes on the Black Widow Spider *Latrodectus mactans.* Psyche Boston **31** 1924 pp. 162–166.

167.—Redikorzev, V. Pseudoscorpions nouveaux de l'Afrique Orientale tropicale. Rev. Russe ent. Leningrad **18** 1924 pp. 187–200 14 figs. [French with Russian rés.]

168.—Reed, F. R. C. The subgenera of *Lichas.* Geol. Mag. London **60** 1923 pp. 454–462.

169.—Reimoser, E. Die Spinnengattung *Micrathena* Sundevall. Verh. Zool. Bot. Ges. Wien **67** 1917 pp. 73–160 9 pls.

170.—Richter, R. and E. Systematik und Statigraphie der Oberdevon-Trilobiten des ostthüringischen Schiefergebirges mit Nachprüfung der Angaben vom Graf zu Münster, R. Richter, Geinitz, Gümbal und Gortani. Senkkenbergiana Frankfurt a. M. **5** 1923 pp. 59–76.

171.—Richter, R. and E. Ueber *Phacopidella* Reed. Senckenbergiana Frankfurt a. M. **5** 1923 pp. 134–143 7 figs.

172.—Richter, R. and E. Der Genotyp von *Proetus* Steininger 1831. Senckenbergiana Frankfurt a. M. **5** 1923 p. 240.

173.—Richter, R. u. E. Unterlagen zum Fossilium Catalogus, Trilobita. 1. Senckenbergiana Frankfurt a. M. **6** 1924 pp. 229–233.

174.—Rimsky-Korsakow, A. P. Die Kugelhaare von *Nemastoma lugubre* Mull. Zool. Anz. Leipzig **60** 1924 pp. 1–16 8 figs.

Robinson, E. G. *vide* Chamberlin.

175.—Roewer, C. F. Die Weberknechte der Erde. Systematische Bearbeitung der bisher bekannten Opiliones. Pp. vi + 1116 1212 figs. Jena (G. Fischer) 1923 8vo.

176.—Roewer, C. F. Arachnida. Opiliones dans: Mission du Service Géographique de l'armée pour la mesure d'un Arc de Méridien Equatorial en Amérique du Sud. Tome 10 Fasc. 2 pp. 121–141 pl. 13 Paris 1919 4to.

177.—Roewer, C. F. Opiliones aus der Siju-Höhle in den Garo-hills im Assam. Rec. Ind. Mus. Calcutta **26** 1924 pp. 69–70 1 fig.

178.—Roewer, C. F. Opilionidae aus Sumatra. Zool. Meded. Leiden **8** 1924 pp. 132–144 8 figs.

179.—Roewer, C. F. Fauna Simalurensis. Opiliones. Zool. Meded. Leiden **8** 1924 pp. 145–151 2 figs.

180.—Roewer, C. F. Opilioniden aus Java. Zool. Meded. Leiden **8** 1924 p. 152.

181.—Romijn, G. und **Viets,** K. Neue Milben. Arch. Natg. Berlin **90** Abt. A Heft 4 1924 pp. 215–225 10 figs.

182.—Ross, I. C. The bionomics of *Ixodes holocyclus* Neumann, with a redescription of the adult and nymphal stages and a description of the larvae. Parasitol. Cambridge **16** 1924 pp. 365–381 1 pl. 2 text-figs.

Rossi, P. *vide* Senevet.

183.—Ruedemann, R. Recent publications on the origin and habitat of the Eurypterida. Amer. J. Sci. New Haven (5) **7** 1924 pp. 227–232.

184.—Sagredo, N. Linguatula rhinaria-Larve (*Pentastomum denticulatum*) in den Lungen des Menschen. Arch. path. Anat. Berlin **251** 1924 pp. 608–615 4 figs.

185.—Samman, C. and **Gatenby,** J. B. Notes on Acarine or Isle of Wight Bee disease. Sci. Proc. R. Dublin Soc. **17** 1924 pp. 357–363 2 pls.

186.—Savory T. H. New evidence of the relationship between the Spiders *Liphistius* and *Segestria*. Ann. Mag. N. H. London (9) **13** 1924 pp. 472–473.

187.—Schenkel, E. Beitrag zur Spinnenkunde. Verh. Natf. Ges. Basel **34** 1924 pp. 78–127 pl. vii.

188.—Schjelderup-Ebbe, T. Eigentümliche Bildung des rechten Beines I. Paares bei *Phalangium*. Ent. Zs. Frankfort o. M. **37** 1923 p. 35.

189.—Schreitmüller, W. Spinnen in: Beiträge zur Fauna Nord- und Nordostfrankreichs etct. Arch. Natg. Berlin **89** A Hft. 12 1924 pp. 183–184.

190.—Schulze, H. Die Hypopi der Mehlmilbe *Tyroglyphus farinae* L 1758. Ent. Ber. Helder **6** 1924 pp. 286–292; also **Oudemans** pp. 292–294.

191.—Schulze, H. Über die Biologie von *Tyroglyphus mycophagus* (Mégnin), zugleich ein Beitrag zur Hypopusfrage. Zs. Morph. Ökol. Berlin **2** 1924 pp. 1–57 17 figs.

192.—Schulze, P. *Haemaphysalis concinna* Koch (Ixod.) in Brandenburg. Ent. Zs. Berlin **1923** p. 612.

193.—Schulze, P. *Ixodes apronophorus* n. sp. eine neue deutsche Zecke von *Arvicola amphibius* L. Zool. Anz. Leipzig **59** 1924 pp. 281–284 5 figs.

194.—Schweizer, J. Beiträge zur Kenntnis der Tierwelt norddeutscher Quellgebiete. Acarina (Landmilben). Arch. Hydrob. Stüttgart **15** 1924 pp. 125–132 4 figs.

195.—Schweizer, J. Beitrag zur Kenntnis der terrestrischen Milbenfauna der Schweiz. Verh. Natf. Ges. Basel **33** 1922 pp. 23–112 4 pls.

196.—Sellnick, M. Oribatide os Brasileiros. 1.—Galumnae. Arch. Mus. Rio de Janeiro **24** 1923 pp. 283–320 44 figs. [Portuguese and German].

197.—Sellnick, M. Oribatiden vom Zwergbirkenmoor bei Neulinum, Kr. Kulm, und vom Moor am Kleinen Heidsee bei Heubude unweit Danzig. Beitrag zur Kenntnis der westpreussichen Milben. Schrift. Natf. Ges. Danzig **15** 1922 pp. 69–77 2 figs.

198.—Sellnick, M. Die Oribatidae der Bernsteinsammlung der Universität Köningsberg i. Pr. Schr. physik Ges. Königsberg **59** 1919 pp. 21–42 1 pl. 23 text-figs.

199.—Sellnick, M. Neue und seltene Oribatiden aus Deutschland. Schr. physik. Ges. Königsberg **61–2** 1922 pp. 35–42.

200.—Sellnick, M. Eine neue Oribatide und Berichtigungen zu einer meiner Arbeiten. Schr. physik. Ges. Königsberg **63** 1922 pp. 97–98 1 fig.

201.—Sellnick, M. Oribatiden der Insel Krakatau. Treubia Batavia **5** 1924 pp. 371–373 3 figs.

Sellnick, M. *vide* Dampf.

202.—Senevet, G. Description de la nymphe de *Hyalomma mauritanicum* Senevet 1922. Arch. Inst. Pasteur Alger **2** 1924 pp. 233–234 fig.

203.—Senevet, G. et **Rossi, P.** Contribution à l'étude des Ixodidés (xiie. Note). Étude saisonnière des Ixodidés de la région de Bouira (Algérie). Arch. Inst. Pasteur Alger **2** 1924 pp. 223–231.

204.—Sharif, M. The external morphology and bionomics of the commonest Indian Tick (*Hyalomma aegyptium*). Bul. Agric. Res. Inst. Pusa no. **152** 1924 pp. 1–23 5 pls.

205.—Sharp, N. A. D. The treatment of Scorpion sting. J. Trop. Med. London **27** 1924 pp. 336–337.

206.—Silvestri, F. Myriapoda from the Siju cave, Garo hills, Assam. Rec. Ind. Mus. Calcutta **26** 1924 pp. 71–79 5 figs.

207.—Smetana, V. Sur les *Paradoxides* les plus anciens du Cambrien de Skreje et Tejřovice. Sborn. Státn. Geol. Úst. Ceskosl. Praze (Prague) **1** 1921 pp. 215–222 [Chechoslav. with French rés.].

208.—Smith, W. W. *Chelifer* in Ants' nests. N. Zealand J. Sci. Techn. Wellington **6** 1924 pp. 341–342.

209.—Sokólska, J. Ueber Ausbleiben der Teilung, respektive über ungleiche Teilung des Golgischen Apparates während der Spermatogenese bei der Hausspinne (*Tegenaria domestica* Cl.). Arch. mikr. Anat. Entwickl. Berlin **103** 1924 pp. 425–429 14 figs.

210.—Solokov, I. Untersuchungen über die Eiablage und den Laich der Hydracarinen. Arch. Hydrobiol. Stüttgart **15** 1924 pp. 383–405 pls. x–xi.

211.—Sokolow, I. Zur Hydracarinenfauna der Umgebung von Perm. Bul. Inst. Rech. Biol. Perm **3** 1924 pp. 107–116.

212.—Southwell, T. On a collection of Linguatulids in the Liverpool School of Tropical Medicine. Ann. Trop. Med. Liverpool **18** 1924 pp. 515–551.

213.—Speare, A. T. and **Yothers, W. W.** Is there an entomogenous fungus attacking the citrus rust mite in Florida ? Science New York **60** 1924 pp. 41–42.

214.—Speyer, E. R. and **Owen, O.** The effect of naphthalene vapour on Red Spider Mite (*Tetranychus telarius* L.). Nature London **113** 1924 pp. 820–821 ; also vol. **114** p. 193.

215.—Stekhoven, J. H. S. Quelques faits de la vie des mites de la gale. Arch. Néerl. Sci. Soc. Holl. Haarlem **9** 1924 pp. 135–136.

Stewart, G. A. *vide* Branson.

216.—Swartz, C. K. and **Prouty, W. F.** Trilobita and Merostomata : in Maryland Geol. Surv. Silurian, Baltimore 1923 pp. 704–718 3 + 2 pls.

Tansey, V. O. *vide* Branson.

217.—Thomas, A. O. Some fossils from an outcrop in Des Moines. Proc. Iowa Acad. Sci. Des Moines **30** 1924 pp. 471–479.

218.—Thor, S. Neue Acarinasammlung vom Wolgadistrikt, &c. Arb. Biol. Wolga-Station Saratow **7** No. 1–2 1923 pp. 44–57 1 pl.

219.—Thor, S. Neue Acarinaformen aus meinen älteren Sammlungen, nebst Bemerkungen über Arten, Gattungen und Familien. Nyt. Mag. Naturw. Kristiania **61** 1924 pp. 91–118 15 figs.

220.—Thuringer, J. M. A note on migration of Myriapoda. Science New York **60** 1924 p. 83; see also O. F. **Cook** p. 294.

221.—Timoney, T. M. The bionomics of the Sarcoptic Mange Parasite of the Buffalo, with some observations concerning the relative power of resistance to adverse conditions of the different stages of the Acarus and of its Egg. Bul. Agr. Res. Inst. Pusa no. **154** 1924 pp. 180–200 4 pls.

222.—Tomb, J. W. The treatment of Scorpion-Sting. Trans. R. Soc. Trop. Med. Hyg. London **17** 1924 p. 520.

223.—Troedsson, G. T. Remarks on the Ontogeny of *Illaenus*. Geol. För. Förh. Stockholm **46** 1924 pp. 215–224 9 figs.

224.—Tubangui, M. A. Two larval Parasites from the Philippine Palm Civet (*Paradoxurus philippensis*). Philippine J. Sci. Manila P. I. **24** 1924 pp. 749–753 2 figs.

225—Tucker, R. W. E. Pear-leaf blister mite (*Eriophyes pyri* Pag.). J. Dept. Agric. Union S. Afr. Pretoria **8** 1924 pp. 316–328 10 figs.

226.—Vellard, J. Études de zoologie [Arachnida]. Arch. Inst. Vital. Brazil Niteroi **2** 1924 pp. 1–32 6 pls. pp. 121–170 8 pls.

227.—Vellard, J. Un nouveau genre d'araignées. Arch. Inst. Vital. Brazil Niteroi **2** 1924 pp. 33–35.

228.—Vellard, J. Au sujet de *Cyrtophora sellata* Linn. Bol. Soc. Entom. Brasil Rio de J. no. **5/6** 1924 pp. 17–19.

229.—Verhoeff, K. W. Chilopoda in Bronn's Klassen und Ordnungen des Tier-Reichs &c. Bd. 5 abt. ii. Lief 83–85 pp. 313–393 1915; Lief 86–91 pp. 395–466 pls. xxi–xxiv 1918; Lief 92–99 pp. 467–537 pls. xxv–xxix 1918 Leipzig (Winter) 8vo.

230.—Verhoeff, K. W. Results of Dr. E. Mjöberg's Swedish Scientific Expeditions to Australia 1910–1913. 34.—Myriapoda: Diplopoda. Ark. Zool. Stockholm **16** no. 5 1924 pp. 1–142 5 pls.

231.—Verhoeff, K. W. Ueber Myriapoden von Mallorca und Ibiza. Ent. Tidsk. Stockholm **45** 1924 pp. 99–109 15 figs.

232.—Viets, K. Hydracarinen aus Süd-afrika in: Deutsche Südpolar Exped. Zool. vol. VIII 1914 pp. 79–85 2 figs.

233.—Viets, K. Holsteinische Halacaridae. Arch. Hydrob. Stüttgart **15** 1924 pp. 118–121 3 figs.

234.—Viets, K. Zwei *Thyas*-Arten von Rügen. Arch. Hydrobiol. Stüttgart **15** 1924 pp. 412–415 6 figs.

235.—Viets, K. Hydracarinen aus Quellen (Systematische und biologisch-faunistiche Untersuchungen). Arch. Hydrobiol. Stüttgart Suppl. Bd. **3** 1924 pp. 205–383 5 pls. 1 map 27 text-figs.

236.—Viets, K. Die Hydracarinen der norddeutschen besonders der holsteinischen Seen. (Versuch einer Oekologie der See-Hydracarinen. Arch. Hydrobiol. Stuttgart Supplement Bd. **4** 1924 pp. 71–180 1 pl. 1 text-fig.

237.—Viets, K. Diagnosen einiger neuer Hydracarinen. Zool. Anz. Leipzig **58** 1924 pp. 103–106.

Viets, K. *vide* Romijn.

238.—Vitzthum, Graf H. Vogel-Acaridae in: Report Sci. Results Norw. Exped. Novaya Zemlya 1921 vol. i no. 8 pp. 1–10 Kristiania 1923 8vo.

239.—Vitzthum, H. Die heutige Acarofauna der Krakatau-Inseln. Treubia Batavia **5** 1924 pp. 353–370 11 figs.

240.—Walch, E. W. Over de Trombiculae, welke de Pseudotyphus overbrengen, en na verwante mijten uit Deli (2e mededeeling). Geneeskundig Tijdschr. Nederl.-Indië Batavia **64** 1924 pp. 499–529 2 pls.

241.—Walcott, C. D. Cambrian and Lower Ozarkian Trilobites. Smithson. Misc. Coll. Washington **75** 1924 pp. 53–60 6 pls.

242.—Walker, A. R. E. Note on a specimen of *Phacops africanus* Lake. Trans. R. Soc. S. Africa Cape Town **12** 1924 p. xcvi.

243.—Walter, C. Quelques espèces nouvelles d'Hydracariens du Maroc et du Soudan. Bul. Soc. Sci. Maroc Rabat **4** 1924 pp. 61–71 11 figs.

244.—Walter, C. Die Hydracarinen der Alpengewässer. Mém. soc. helvét. sci. nat. Zurich **58** Mém. 2 1922 pp. i–vii 61–251 50 figs.

245.—Walter, C. Neue Hydracarinen aus Unterfranken. Zool. Anz. Leipzig **59** 1924 pp. 105–108 4 figs.

246.—Yorke, W. and **Macfie,** J. W. C. *Trypanosoma evansi* and *Ornithodorus crossi.* Ann. Trop. Med. Liverpool **18** 1924 pp. 125–126.

Yothers, W. W. *vide* Speare.

247.—Zaharesco, V. Sur la présence de l'espèce *Atypus piceus* Sulzer en Moldavie (Roumanie). Ann. Sci. Univ. Jassy **13** 1924 p. 193.

II.—SUBJECT INDEX.

The number in Clarendon, when not referring to a volume, indicates the full reference in the list of Titles.

GIGANTOSTRACA.

Historical and General.—Bibliography, RICHTER, **170**; Nomenclature, etct., Trilobites, RICHTER, **173**; of Eurypterids, RUEDEMANN, **183**; Methods of vital staining of *Limulus*, LOEB & BLANCHARD, **128**.

Structure and Development. — Of *Illaenus*, TROEDSSON, **223**.

Physiology.—Respiration in *Limulus*, GARREY, **85**.

Phylogeny. — Eurypterids, RUEDEMANN, **183**.

DISTRIBUTION AND FAUNAS.

GEOLOGICAL.

Cambrian.—Bornholm, POULSEN, **163**; Chechoslavia, SMETANA, **207**; North America, WALCOTT, **241**.

Silurian.—Sweden, FUNQUIST, **83**; New South Wales, MITCHELL, **142**; Maryland, U.S.A., SWARTZ & PROUTY, **216**; New York, U.S.A., CLARKE, **55**; Nova Scotia, MCLEARN, **132**.

Devonian.—Germany, RICHTER, **170**, **171**; Russia, PERNE, **161**; Missouri U.S.A., BRANSON, TANSEY & STEWART, **28**.

Carboniferous. — Yorkshire, KING, **123**; Belgium, DEMANET, **66**; PRUVOST, **164**; Iowa, U.S.A., THOMAS, **217**.

Permian.—Japan, HAYASAKA, **98**.

PANTOPODA.

Phylogeny.—LOMAN, **129**.

ARACHNIDA

(incl. **Tardigrada** & **Pentastomida**).

GENERAL AND HISTORICAL.

Bibliography.—Pentastomid, HETT, **99**.

Nomenclature.—Acarid, ANON., **6**; COCKERELL, **57**.

Phylogeny and Classification.—Aranid, PETRUNKEVITCH, **162**; SAVORY, **186**; Acarid, JAKOB, **111**, **112**, **116**; THOR, **219**; Pentastomid, HAFFNER, **96**.

Biography.—E. Simon, FAGE, **78**.

Methods. — Mounting Leaf-Mites, NALEPA, **146**.

Museum Catalogues. — SOUTHWELL, **212**.

Economics; Venoms.—Of Spiders, DRENSKI, **69**; Scorpions, BAERG, **8**; DIAS, LIBANIO & LISBOA, **67**; SHARP, **205**; TOMB, **222**; Pseudoscorpions, CHAMBERLIN, **41**.

Economics; Medical. — Craw-Craw, BLACKLOCK, **22**; Tick paralysis in Sheep, BLANC & CAMINOPETROS, **23**; Spirochaete infection by *Ornithodorus*, HOOF, **105**; Relapsing fever and *Ornithodorus*, INGRAM, **108**; YORKE & MACFIE, **246**; *Sarcoptes* and Buffalo, TIMONEY, **221**; Pseudotyphus and *Trombicula*, WALCH, **240**.

Economics; Miscellaneous.—Acarine Bee-disease, SAMMAN & GATENBY, **185**; Mites and plant-disease, GURNEY, **95**; SPEYER & OWEN, **214**; TUCKER, **225**.

STRUCTURE.

General. — Pentastomids, HAFFNER, **96**; HETT, **99**; Scorpionids, PAVLOVSKY, **159**, **160**; Solifugae, BIRULA, **18**; Pseudoscorpionids, CHAMBERLIN, **41**; Opilionids, MÜLLER, **144**; ROEWER, **175**; Acarids, CAMERON, **35**; CHODZIESMER, **53**; Jakob, **112**, **116**; OUDEMANS, **154**.

Nervous system.—Sense organs, Araneids, GERHARDT, **88**; eyes, Araneids, MALLOCK, **133**.

Respiration.—Lung books, Araneids, KASTNER, **120**.

Miscellaneous. — Limbs and locomotion, Araneids, KÄSTNER, **119**; Gland-bristles, Opilionids, RIMSKY-KORSAKOW, **174**; Rostrum, Acarids, ANDRÉ, **3**.

PHYSIOLOGY.

Sense-organs.—Araneids, GERHARDT, **88**; Eyes, Araneids, MALLOCK, **133**; Taste, Araneids, BONNET, **27**.

Digestion.—Araneids, BONNET, **27**.

Locomotion. — Araneids, KÄSTNER, **119**.

Photo-reaction. — Scorpionids, PATTEN, **158**.

Biochemistry. — Scorpion venom, DRENSKI, **69**; BAERG, **8**; DIAS, LIBANIO & LISBOA, **67**; LÉVY, **127**.

DEVELOPMENT.

Life History and Larval Development. —Acarids, CAMERON, **35**; CHODZIESMER, **53**; BRUMPT, **32**; LUNDBLAD, **131**; ROSS, **182**; SCHULZE, **190, 191**; SENEVET, **202**; STEKHOVEN, **215**; Pentastomid, HETT, **99**.

Embyology. — Scorpionid, GILTAY, **91**.

Gametogenesis. — Scorpionids, NATH, **148**; BHATTACHARYA & GATENBY, **17**; GATENBY, **86**; Araneids, SOKÓLSKA, **209**.

ETHOLOGY.

General Habits.—Araneids, ABRAHAM, **1, 2**; RAU, **166**; MONIER, **143**; JOSEPH, **117**; BISHOP, **20**; Pseudscorpions, W. W. SMITH, **208**; Acarids, CHODZIESNER, **53**; SCHULZE, **191**; SHARIF, **204**; TIMONEY, **221**; WALTER, **244**.

Habitats.—Myrmecophily, Acarids, MENOZZI, **139**; Pseudoscorpions, W. W. SMITH, **208**; Cavernicolous Pedipalps, GRAVELY, **93**; Araneids, FAGE, **79**; Opiliones, ROEWER, **177**.

Sexual Relations.—Araneids, BONNET **26**; GERHARDT, **87, 89**; Acarids, SOLOKOW, **210**.

Ecology and external influences.—Acari, VIETS, **235, 236**; WALTER, **244**; Seasonal appearance, Acari, SENEVET & ROSSI, **203**; Influence of Plant-Mites on the sex of Willows, HARRISON, **97**.

VARIATION AND ÆTIOLOGY.

Teratology Opilionid, SCHJELDERUP-ELBE, **188**; Acarid, BEDFORD, **12**.

DISTRIBUTION AND FAUNAS.

British Isles.—Araneids, JACKSON, **101**; Ireland, Araneids, PACK-BERESFORD, **156**; England, Acarids, HIRST, **102**; Wales, Acarids, FALCONER, **80**.

Europe.—France, Araneids, BERLAND, **14**; SCHREITMÜLLER, **189**; Acarids, COTTE, **60**; Belgium, Araneids, SCHREITMÜLLER, **189**; Holland, Acarids, OUDEMANS, **154**; ROMIJN & VIETS, **181**; Norway and Denmark, Acarids, THOR, **219**; Sweden, Acarids, LUNDBLAD, **130**; VIETS, **235**; Spitsbergen, Araneids, JACKSON, **109**; Germany, Acarids, ROMIJN & VIETS, **181**; SCHULZE, **192, 193**; SCHWEIZER, **194**; SELLNICK, **197, 199, 200**; THOR, **219**; VIETS, **233, 234, 235, 236**; WALTER, **245**; Switzerland, Araneids, SCHENKEL, **187**; Acarids, OBERMEYER, **152**; SCHWEIZER, **195**; WALTER, **244**; Austro-Hungary, Aranids, CHYZER & OTHERS, **54**; KULCZYŃSKI, **125**; Spain, Pseudoscorps, BOLIVAR, **24**; NAVAS, **150**; Araneids, KULCZYŃSKI, **125**; Italy, Scorpionids, MENOZZI, **138**; Araneids, CAPORIACCO, **37**; Opilionids, CAPORIACCO, **38**; Pseudoscorpions, CAPORIACCO, **36**; Balkan States, Araneids, ZAHARESCO, **247**; KULCZYŃSKI, **125**; Russia, Acarids, SOKOLOW, **211**; THOR, **218**; Esthonia, Araneids, Opiliones, etct., DAMPF, **65**; Finland, Tardigrada, NEDERSTRÖM, **151**; Novaya Zemlya, Acarids, VITZTHUM, **238**.

Atlantic Islands.—Madeira, Araneids, COCKERELL, **56**.

North Africa.—Morocco, Scorpionids, PALLARY, **157**; Acarids, WALTER, **243**; Algeria, Acarids, SENEVET & ROSSI, **203**; Tunisia, Acarids, ANDRÉ, **4**. LARROUSE, **126**; Egypt, Acarids, HIRS **104**.

Eastern Asia.—North China, Acarids, JACOT, **113**.

West Africa.—Acarids, JOYEUX, **118**; VIETS, **237**.

South Africa.—Acarids, HIRST, **124**; VIETS, **232**.

Central and East Africa.—Pseudoscorpions, REDIKORZEV, **167**; Acarids, MEZA, **141**; WALTER, **243**; Pentastomids, HETT, **100**.

Indian Region.—India, Araneids, GRAVELY, **94**; FAGE, **79**; Pedipalps, GRAVELY, **93**; Opiliones, ROEWER, **177**; Acarids, HIRST, **102**; Indo-China, Acarids, ANDRÉ, **5**; South China, Araneids, R. V. CHAMBERLIN, **49**; Malay Peninsula, Araneids, ABRAHAM, **1, 2**; Sumatra and Simulur I., Opiliones ROEWER, **178, 179**; Acarids, WALCH, **240**; Java, Opiliones, ROEWER, **180**; Acarids, NALEPA, **147**; SELLNICK, **201**; VITZTHUM, **239**; OUDEMANS, **154**; Philippine Is., Pentastomid, TUBANGUI, **224**.

Australian Region.—Indo-Australian Islands, Scorpionids, KOPSTEIN, **134**; Australian, Araneids, GLAUERT, **92**; Araneids, BUTLER, **33**; Acarids, FERGUSON, **82**; GURNEY, **95**; ROSS, **182**; New Zealand, Acarids, HIRST, **104**; New Caledonia, Araneids, BERLAND, **13**; Samoan Is., Acarids, JACOT, **114**; Fiji Is., Acarids, HIRST, **102**; Hawaiian I., Acarids, EWING, **74**.

Neotropical Region.—Araneids, REIMOSER, **169**; Argentina, Araneids, CARBONELL, **39**; Chile, Araneids, JOSEPH, **117**; Pseudoscorpions, J. C. CHAMBERLIN, **45**; Ecuador, Opiliones, ROEWER, **176**; Brazil, Araneids, MELLO-LEITÃO, **135, 137**; VELLARD, **226, 227, 228**; Opiliones, MELLO-LEITÃO, **136**; Acarids, SELLNICK, **196**; Galapagos Is., Araneids, BANKS, **10**.

Nearctic Region (including Mexico).—Lower California Araneids, R. V. CHAMBERLIN, **48**; United States, Araneids, BISHOP, **19, 20**; R. V. CHAMBERLIN, **49**; EMERTON, **72, 73**; Pseudoscorpions, J. C. CHAMBERLIN, **42, 43, 44**; Opiliones, CROSBY & BISHOP, **62**; Acarids, EWING, **75, 76, 77**; HIRST, **101**; JACOT, **115**; Canada, Scorpionids, CHAMBERLIN & ROBINSON, **52**; Araneids, EMERTON, **71**; Acarids, MARSHALL, **134**.

GEOLOGICAL.

Carboniferous Arachnids, England, GILL, **90**.

Post-tertiary Germany, Acarids, SELLNICK, **198**.

MYRIOPODA.

GENERAL.

Phylogeny and Classification.—VERHOEFF, **230**.

STRUCTURE.

Anatomy.—General, VERHOEFF, **229**; Gonopods, VERHOEFF, **230**; Segmentation, BECKER, **11**; Nervous system, BHATIA, **16**; Alimentary Canal, RANDOW, **165**.

PHYSIOLOGY.

Nutrition.—RANDOW, **165**.

Temperature.—CROZIER, **63**.

Venom.—BAERG, **8**.

DEVELOPMENT.

Oogenesis.—KING, **121, 122**; NATH, **149**.

Cytology of early stages.—GAJEWSKA, **84**.

ETHOLOGY.

General habits.—VERHOEFF, **229**; Nesting habits, DUBOST, **70**; Cavernicolous habitat, SILVESTRI, **206**; Migrations, THURINGER, **220**; Light reactions, MÜLLER, **145**.

AETIOLOGY.

Variation.—ARCHEY, **7**.

DISTRIBUTION AND FAUNAS.

Palaearctic Region.—England, BAGNALL, **9**; Hungary, DADAY DE DÉES, **64**; Esthonia, DAMPF, **65**; Balearic Is., VERHOEFF, **231**; Morocco, BROLEMANN, **30**.

Ethiopian Region.—French Sudan, BROLEMANN, **31**.

Indian Region.—Assam and Malay Peninsula, SILVESTRI, **206**; China, COOK & LOOMIS, **59**; Borneo and Tonkin, VERHOEFF, **230**; Philippine Is., R. V. CHAMBERLIN, **46**.

Australian Region.—Australia, VERHOEFF, **230**; New Zealand, ARCHEY, **7**; New Caledonia, CARL, **40**.

Neotropical Region. — Bt. Guiana, R. V. CHAMBERLIN, **51**; Galapagos, R. V. CHAMBERLIN, **50**; Nicaragua, R. V. CHAMBERLIN, **4.7**

GEOLOGICAL.

Carboniferous England, GILL, **90**.

PROTRACHEATA.

Geographical distribution.—Kei Is., Australian Region, HORST, **106**.

III.—SYSTEMATIC INDEX.

N.B.—The number in Clarendon, when not that of a Volume, refers to the list of Titles.

GIGANTOSTRACA.

TRILOBITA.

Note on rectifications of synonymy and nomenclature, RICHTER **173.**

A review of the older works on the Devonian Trilobites of Thuringia, RICHTER **170.**

An innominate pygidium from Carboniferous Limestone of Yorkshire fig., KING **123.**

The Asaphus region of south Sweden and its Trilobites with many figures to work out the correlation of the strata, FUNQUIST **83.**

Cambrian and Ozarkian Trilobites of North America, WALCOTT **241.**

†*Agnostus pisiformis* and other species from Cambrian, Bornholm figured p. 21, POULSEN **163.**

†*Amecephalus* **gen. n.** for type *Ptychoparia piochensis* Walc., WALCOTT Smiths. Misc. Coll. **75** p. 53 fig.

†*Anoria* **gen. n.** for type *Dolichometopus tontoensis* Walc., WALCOTT Smiths. Misc. Coll. **75** p. 54 fig.

†*Armonia* **gen. n.** for type *A. pelops* **sp. n.** U. Cambrian U.S.A., WALCOTT Smiths. Misc. Coll. **75** p. 54 fig.

Autolichas **subgen. n.** vide *Lichas*.

†*Bellefontia* **gen. n.** [ex Ulrich M.S.] for type *Hemigyraspis collieana* Raym., WALCOTT Smiths. Misc. Coll. **75** p. 54 figs.

†*Brachymetopus ouralicus* p. 245 fig. **164,** DEMANET **66.**

†*Bronteus* (*Goldius*) *singularis* fig. 8, *B. platynotus* fig. 9, **spp. n.,** Silurian N. S. Wales, MITCHELL Proc. Linn. Soc. N. S. W. **49.**

†*Burnetia* **gen. n.** for type *Ptychoparia* (?) *urania* Walc., WALCOTT Smiths. Misc. Coll. **75** p. 54 figs.

†*Bynumia* **gen. n.** for type *B. eumus* **sp. n.** U. Cambrian Bt. Columbia, WALCOTT Smiths. Misc. Coll. **75** p. 54 figs.

†*Calymene pulchra* pl. 1 figs. 5–6 p. 36, FUNQUIST **83.**—*C. intermedia antigonishensis* **var. n.** p. 162 figs. Silurian Nova Scotia and other species figured, MCLEARN Mem. Geol. Surv. Canada **137.**—*C. macrocephala* p. 708 figs., *C. cresapensis* p. 710 figs., **spp. n.,** *C. niagarensis restricta* p. 708 figs. **var. n.** and other species figured, Silurian Maryland, PROUTY Maryland Geol. Surv. 1923.

†*Cedaria* **gen. n.** for type *C. prolifica* **sp. n.** U. Cambrian Wisconsin, WALCOTT Smiths. Misc. Coll. **75** p. 55 figs.

†*Ceratolichas gryps* p. 264 figs., STEWART (see BRANSON **28**).

†*Chancia* **gen. n.** for type *C. prolifica* **sp. n.** U. Cambrian Wisconsin, WALCOTT Smiths. Misc. Coll. **75** p. 55 figs.

†*Corbinia* **gen. n.** for type *C. horatio* **sp. n.** Ozark beds, Alberta, WALCOTT Smiths. Misc. Coll. **75** p. 55 figs.

†*Cordania gardneri* p. 53 fig. 15, MITCHELL **142.**

†*Corydocephalus ptyonurus* p. 704 fig., SWARTZ & PROUTY **216.**

†*Crusola* **gen. n.** for type *C. cebes* **sp. n.** Cambrian Montana, WALCOTT Smiths. Misc. Coll. **75** p. 55 fig.

†*Cryphaeus boothi* p. 162 figs., BRANSON **28.**

†*Cryptonymus incertus* p. 48 fig. 2, *C. robustus* p. 49 fig. 3, *C. perannulatus* p. 50 fig. 4, *C. angustus* p. 50 fig. 5, 6, **spp. n.,** Silurian N. S. Wales, *C. platynotus* p. 47 fig. 1, MITCHELL Proc. Linn. Soc. N. S. W. **49.**

†*Ctenopyge neglecta* var. *bornholmensis* **var. n.** Cambrian Bornholm p. 37 and other species, figs., POULSEN **163.**

†*Cyrtosymbole crebra* p. 39 figs., *C. plenifrons* p. 42 figs., *C. incerta* p. 43 figs. **spp. n.,** Devonian Urals, PERNA Mém. Com. Geol. Petrograd livr. **138.**

†*Delmanites carlwegi* **sp. n.** Devonian Missouri, TANSEY Missouri Bureau Geol. (2) **17** p. 209 fig., *D. slocomi* p. 266 figs., *D. praenuntia* p. 267 figs., **spp. n.,** Devonian Missouri and other species figured, STEWART t.c.—*D. weaveri* p. 169 figs., MCLEARN **132.**

†*Dalmanitina logani* p. 167 figs., *D. logani* var. *conservatrix* p. 168 figs., MCLEARN **132.**

†*Denckmannia limaria* p. 30 figs., *D. revertens* p. 34 figs., **spp. n.,** Devonian Urals, PERNA Mém. Com. Geol. Petrograd livr. **138.**

†*Dokimocephalus* **gen. n.** for type *Ptychoparia pernasuta* Walc., WALCOTT Smiths. Misc. Coll. **75** p. 55 fig.

†*Dunderbergia* **gen. n.** for *Crepicephalus nitidus* Hall & Whitfield, WALCOTT Smiths. Misc. Coll. **75** p. 56 fig.

†*Elkia* **gen. n.** for type *Dicellocephalus nasutus* Walc., WALCOTT Smiths. Misc. Coll. **75** p. 56 figs.

†*Elrathia* **gen. n.** for type *Conocoryphe kingii* Meek, WALCOTT Smiths. Misc. Coll. **75** p. 56 fig.

†*Elvinia* **gen. n.** for type *Dikelocephalus roemeri* Shumard, WALCOTT Smiths. Misc. Coll. **75** p. 56 fig.

†*Encrinurus frontalis* **sp. n.** p. 51 fig. 7 and other species figured, Silurian N. S. Wales, MITCHELL Proc. Linn. Soc. N. S. W. **49.**—*E. ornatus* p. 705 fig., SWARTZ & PROUTY **216.**

†*Eurekia* **gen. n.** for type *E. granulosa* **sp. n.** U. Cambrian U.S.A., WALCOTT Smiths. Misc. Coll. **75** p. 56 fig.

†*Eurycare latum* and other species figured from Cambrian Bornholm p. 33, POULSEN **163.**

†*Goldius barrandii* p. 208 fig., TANSEY (see Branson **28**).

†*Griffithides globiceps, G. carringtonensis, G. seminiferus* pp. 242–3 figs. 161–3, DEMANET **66.**—*G. scitulus* p. 478 fig. 38, THOMAS **217.**

†*Hardyia* **gen. n.** for *H. metion* **sp. n.** Ozark Canada, WALCOTT Smiths. Misc. Coll. **75** p. 57 fig.

†*Hemiaspis eriensis* **sp. n.** Silurian New York, CLARKE New York State Mus. Bul. no. 251 p. 119 figs.

†*Holteria* **gen. n.** for *Ogygia* (?) *problematica* Walc., WALCOTT Smiths. Misc. Coll. **75** p. 57 fig.

†*Homalonotus lobatus* **sp. n.** Silurian Maryland, PROUTY Maryland Geol. Surv 1923 p. 714 fig.—*H. knighti* p. 163 figs., *H. dawsoni* p. 164 figs., MCLEARN **132.**

†*Housia* addt. diagnosis p. 57 fig., WALCOTT **241.**

†*Idahola* **gen. n.** for *I. serapio* **sp. n.** U. Cambrian Idaho, WALCOTT Smiths. Misc. Coll. **75** p. 58 fig.

†*Iddingsia* **gen. n.** for *Ptychoporia similis* Walc., WALCOTT Smiths. Misc. Coll. **75** p. 58 fig.

†*Illaenus* structure, growth, etct., TROEDSSON **223.**

†*Irvingella* **gen. n.** for *I. major* **sp. n.** U. Cambrian U.S.A. [ex Ulrich & Resser M.S.], WALCOTT Smiths. Misc. Coll. **75** p. 58 fig.

†*Kingstonia* **gen. n.** for *K. apion* **sp. n.** U. Cambrian U.S.A., WALCOTT Smiths. Misc. Coll. **75** p. 58 fig.

†*Leptoplastus ovatus* p. 35, *L. stenotus* pp. 36 58 figs., POULSEN **163.**

†*Lichas* revision of subgeneric groups, *Autolichas* for *L. affinis* Ångelin, *Radiolichas* for *L. aranea* Holzapfel **subgg. n.**, REED Geol. Mag. **60** p. 455.

†*Maladia* **gen. n.** for *M. americana* **sp. n.** Cambrian U.S.A., WALCOTT Smiths. Misc. Coll. **75** p. 59 fig.

†*Modicia* **gen. n.** for *Arionellus oweni* Meek & Heyden, WALCOTT Smiths. Misc. Coll. **75** p. 59 fig.

†*Moosia* **gen. n.** for *M. grandis* **sp. n.** Ozarkian Rocky Mts., WALCOTT Smiths. Misc. Coll. **75** p. 59 fig.

†*Moxomia* **gen. n.** for *M. hecuba* **sp. n.** Ozarkian Bt. Columbia, WALCOTT Smiths. Misc. Coll. **75** p. 59 fig.

†*Olenus truncatus* and other species figured from Cambrian, Bornholm p. 25, POULSEN **163.**

†*Parabolina spinulosa* and other species figured from Cambrian Bornholm p. 29, POULSEN **163.**

†*Paradoxides perneri, P. kuštai* p. 216 figs. 1, 2, *P. walcotti, P. tejřovicensis* p. 218 figs. 34, **spp. n.**, Cambrian Chechoslavia, SMETANA Sborn. Státn. Geol. **1.**

†*Peltura scarabaeoides* pp. 50 58 figs., POULSEN **163.**

†*Phacopidella* revision and review, *P. ductifrons* p. 141 figs. 1–2, *P. diensti* p. 142 figs. 3–7, **spp. n.**, Devonian Germany, RICHTER Senckenbergiana **5.**

†*Phacops marklandensis* p. 171 figs., MCLEARN **132.**—*P. africanus* on thoracic spine present WALKER **242.**—*P. cristata* p. 163 figs., *P. hudsonicus* p. 210, *P. logani* p. 211 figs., TANSEY (see BRANSON **28**).—*P. granulatus* and var. nov. ined. from Devonian Urals figured p. 12, PERNA **161.**

†*Phillipsia* in Permian of Japan p. 113 figs. 12–14, HAYASAKA **98**.—*P. eichwaldi*, *P. laticauda*, *P. derbyensis* p. 243–4 fig. 165, DEMANET **66**.

†*Platypeltis croftii* p. 60 pl. 14 fig. 5, WALCOTT **241**.

†*Proetus* the genotype discussed, RICHTER **172**.—*P. crassimarginatus* pp. 125–161 figs.—*P. conradi* p. 263 figs., STEWART (see BRANSON **28**).

†*Psilocephalus innotatus* p. 60 pl. xiv fig. 8, WALCOTT **241**.

Radiolichas **subg. n.** vide *Lichas*.

†*Sphaerophthalmus major* p. 47 fig., POULSEN **163**.

†*Taenicephalus* **gen. n.** [ex Ulrich & Resser M.S.] for *Conocephalites shumardi* Hall, WALCOTT Smiths. Misc. Coll. **75** p. 59 fig.

†*Tostonia* **gen. n.** for *Dicellocephalus iole* Walc., WALCOTT Smiths. Misc. Coll. **75** p. 59 fig.

†*Trimerocephalus ocellatus* p. 24 figs., **sp. n.** Devonian, Urals and other species figured, PERNA Mém. Geol. Com. Petrograd livr. **138**.

†*Trinucleus coscinorrhinus* pl. 1 figs. 7–22 p. 34, FUNQUIST **83**.

†*Ucebia* **gen. n.** for *U. ara* **sp. n.** U. Cambrian U.S.A., WALCOTT Smiths. Misc. Coll. **75** p. 60 fig.

†*Utia* **gen. n.** for *U. curio* **sp. n.** M. Cambrian Idaho, WALCOTT Smiths. Misc. Coll. **75** p. 60 fig.

†*Wilbernia* **gen. n.** for *Ptychoparia pero* Walc., WALCOTT Smiths. Misc. Coll. **75** p. 60 fig.

†*Xenostegium* **gen. n.** for *Asaphus gonioceras* Meek, WALCOTT Smiths. Misc. Coll. **75** p. 60 fig.

XIPHOSURA.

Limulus polyphemus physiology of respiration, GARREY **85**; methods of vital staining, LOEB & BLANCHARD **128**.

†*Cyclus* sp. ? nr. *johnsoni* a new example from the Tyne coalfield discussed and figured p. 463, GILL **90**.

EURYPTERIDA.

Systematic catalogue of the Eurypterida, DIENER **68**.

Habitat and origin of the Eurypterids, RUEDEMANN **183**.

†*Dolichopterus cumberlandicus* **sp. n.** Silurian. Maryland, SWARTZ Maryland Geol. Surv. 1923 p. 717 figs.

†*Eurypterus flinstonensis* **sp. n.** Silurian Maryland, SWARTZ Maryland Geol. Survey 1923 p. 716 fig.

†*Glaucodes mathieui* **gen.** et **sp. n.** Carboniferous Belgium, PRUVOST Ann. Soc. Geol. Lille **48** 1924 pp. 143–151 1 pl.

†*Hughmilleria* cf. *shawangunk* p. 716 fig., SWARTZ & PROUTY **216**.

PANTOPODA.

(= Pycnogonida.)

On the origin and affinities of Pycnogonids, LOMAN **129**.

ARACHNIDA.

(Including Tardigrada and Pentastomida.)

SCORPIONES.

Structure and morphology of Scorpions, PAVLOVSKY **159**, **160**.

Spermatogenesis in Scorpions, BATHTACHARYA & GATENBY **17**; also GATENBY **86**.

The Scorpions of Florence, CAPORIACCO **38**.

List of Indo-Australian Scorpions and their distr. Sumatra to Timor, KOPSTEIN **124**.

Scorpion venom and its effects and cure, BAERG **8**; DIAS, LIBANIO & LISBOA **67**; SHARP **205**; TOMB **222**; Haemolysis by Scorpion venom, LÉVY **127**.

Buthus gentili p. 219 fig. 1, *B.* (*Hottentota*) *lutandi* p. 220 fig. 2, *B.* (*Prionurus*) *lionvillei* p. 221 figs. 3, 4 Morocco, **spp. n.**, PALLARY Arch. Inst. Pasteur Alger **2**.

Euscorpius carpathicus nr. Modena and note on *E. italicus* p. 83, MENOZZI **138**; postembryonic developement p. 54, GILTAY **91**.—*E. flavicaudis* reaction to stimulations in young and adults, HOVASSE **107**.

Isometroides angusticaudus additional example obtained in W. Australia p. 63, GLAUERT **92**.

Mastigoproctus experiments in reactions to light, PATTEN **158**.

Vejovis boreus, northern range in Alberta, CHAMBERLIN & ROBINSON **52**.

PEDIPALPI.

Schizomus sijuensis **sp. n.** Siju cave Assam, GRAVELY Rec. Ind. Mus. **26** p. 61 1 fig.

PALPIGRADI.

(Vacant.)

ARANEAE.

Instinct and the sense-organs of Spiders, GERHARDT **88**.

The eyes and vision of Spiders, MALLOCK **133**.

Morphology and physiology of locomotion, KÄSTNER **119**.

The anatomy of the lung-books, KÄSTNER **120**.

On digestion and the sense of taste, BONNET **27**.

On sexual relations and size-dimorphism in Spiders, GERHARDT **87 89**.

A revision of the classification of the Araneae, PETRUNKEVITCH **162**.

A review of the Brazilian families of Spiders with descriptions of many new species, VELLARD **226**.

New and rare Irish Spiders, PACK-BERESFORD **156**.

Notes on Swiss Spiders, SCHENKEL **187**.

Arachnids of Italy, CAPORIACCO **37 38**.

Spiders in Madeira, COCKERELL **56**.

Mygalomorph Spiders of the Malay Peninsula, with notes on habits, etct., ABRAHAM **1**.

The Spiders of New Caledonia, with many new and previously described species figured, BERLAND **13**.

A review of the Theraphosid Spiders of Argentina, CARBONELL **39**.

Spiders from the shores and islands of the Gulf of California, R. V. CHAMBERLIN **48**.

Evolution of the habits of Spiders MONIER **143**.

LIPHISTIDAE.

Liphistius, its relationship to *Segestria* on account of its web, SAVORY **186**.—*L. batuensis* note on anatomy, BUXTON **34**.

AVICULARIIDAE.

(= Mygalidae.)

Acanthoscurria urens p. 140 fig., *A. pugnax* p. 142 fig., *A. atrox* p. 143 fig., **spp. n.**, Brazil, VELLARD Arch. Inst. Vital. Brazil **2**.

Barychelus rouxi **sp. n.** N. Caledonia, BERLAND Nova Caledonia **3** p. 172 figs. 4, 5.

Coremiocnemis validus addt. descript., range, figs. p. 1117, ABRAHAM **1**.

Damarchus cavernicolus **sp. n.** Malay Pen., habits and figs. of this and other species, ABRAHAM P. Z. S. **1924** p. 1095.

Diplura paulistana, *D. borgmeyeri* **spp. n.**, Brazil, MELLO-LEITAO Ann. Soc. Ent. Paris **93** p. 185.

Evagrus empiricus p. 576, *E. pragmaticus* p. 576 fig. 1, *E. josephus* p. 277 figs. 2, 3, *E. scepticus* p. 578, **spp. n.**, L. Cal., R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12**.

Fufius funebris **sp. n.** Brazil, VELLARD Arch. Inst. Vital. Brazil **2** p. 153 fig. 43.

Harmonicon nigridorsi **sp. n.** Brazil, MELLO-LEITAO Ann. Soc. Ent. Paris **93** p. 186.

Homoeomma humile **sp. n.** Brazil, VELLARD Arch. Inst. Vital. Brazil **2** p. 150 fig. 37.

Idiectis littoralis **sp. n.** Singapore, ABRAHAM P. Z. S. 1924 p. 1098 2 figs.

Ischnothele indigens **sp. n.** Brazil, VELLARD Arch. Inst. Vital. Brazil **2** p. 157 fig. 42.

Lampropelma violaceopedes **sp. n.** Penang, ABRAHAM P. Z. S. **1924** p. 1108 figs.

Migas affinis **sp. n.** N. Caledonia, BERLAND Nova Caledonia **3** p. 170 figs. 1–3.

Nemesia manderstjernae descript. p. 897, KULCZYNSKI **125**.

Neodiplothele fluminensis **sp. n.** Brazil, MELLO-LEITAO Ann. Soc. Ent. Paris **93** p. 187.—*N. picta* **sp. n.** Brazil, VELLARD Arch. Inst. Vital. Brazil **2** p. 149 fig. 40.

Oligoxystre **gen. n.** p. 151 for *O. auratum* p. 152 fig. 38 **sp. n.** Brazil, VELLARD Arch. Inst. Vital. Brazil **2**.

Prorachias **gen. n.** for *P. bristowei* **sp. n.** Brazil, MELLO-LEITÃO Ann. Soc. Ent. Paris **93** p. 184.

Rachias virgatus **sp. n.** Brazil, VELLARD Arch. Inst. Vital. Brazil **2** p. 158 fig. 41.

Selenocosmia tehanensis **sp. n.** Malay Pen., ABRAHAM P. Z. S. **1924** p. 1115 figs.

Sipalolasma ophiriensis p. 1101 figs., *S. aedificatrix* p. 1104 figs. Malay Pen., ABRAHAM P. Z. S. **1924**.

Trechona venosa descript. male p. 155 fig. 44, VELLARD **226**.

ATYPIDAE.

Atypus affinis new to Switzerland p. 80, SCHENKEL **187**.—*A. piceus* in Rumania, ZAHARESCO **247**.

Calommata sundaica at Singapore dentition and habits p. 1120 2 figs., ABRAHAM **1**.

SICARIIDAE.

(= Scytotidae.)

Diguetia stridulans p. 590 figs. 19–20, *D. dialectica* p. 591, **spp. n.**, L. Cal., R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12**.

Kibramoa **gen. n.** for type *K. supernans* (Chamberlin), R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12** p. 589.

Plectreurys bispinosus p. 586 figs. 12–17, *P. valens* p. 587 fig. 18, *P. ceralbonus* p. 588, **spp. n.**, L. Cal. R. V. CHAMBERLIN Proc. Cal. Acad. **12** 393.

Scytodes redempta, *S. pnoeitens*, **spp. n.**, L. Cal., R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12** p. 592.

OONOPIDAE.

Scaphiella hespera p. 593 figs. 21–23, *S. litoris* p. 594 figs. 24–25, **spp. n.**, L. Cal., R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12**.

Yumates **gen. n.** for type *Y. nesophila* **sp. n.** p. 595; also *Y. angela* **sp. n.** L. Cal. p. 596, R. V. CHAMBERLIN, Proc. Cal. Acad. Sci. **12**.

DYSDERIDAE.

Ariadna neocaledonica p. 185 figs. 29–32, *A. dissimilis* p. 187 fig. 43 N. Caledonia, BERLAND Nova Caledonia **3**.—*A. gracilis* **sp. n.** Brazil, VELLARD Arch. Inst. Vital. Brazil **2** p. 160 fig. 45. —*A. pragmatica*, *A. philosopha* p. 606, *A. scholastica* p. 607, **spp. n.**, L. Cal. R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12**.

Citharoceps **gen. n.** p. 608 for *C. fidicina* p. 609 **sp. n.** L. Cal., R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12**.

Dysdera lusitanica **sp. n.** Spain, KULCZYŃSKI Bul. Intern. Krakow for **1914** B 1915 p. 905 fig. 6, 7.

Harpactes henschii **sp. n.** Bosnia, KULCZYŃSKI Bul. Intern. Krakow for **1914** B 1915 p. 909 figs. 19–21.

Legestria senoculata sex-relations p. 149, GERHARDT **87**.—*S. cavernicola* **sp. n.** Tergestum, KULCZYŃSKI Bul. Intern. Krakow **1914** B p. 912.—*L. danzantica* **sp. n.** L. Cal. R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12** p. 603.

CAPONIIDAE.

Nopsides **gen. n.** p. 601 for type *N. ceralbona* **sp. n.** p. 602 figs. 38–41 L. Cal. R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12**.

Orthonops **gen. n.** p. 597 for type *O. overtus* **sp. n.** L. Cal. p. 598, R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12**.

Tarsonops **gen. n.** p. 598 for type *T. sectipes* **sp. n.** p. 599 figs. 31–34, also *T. clavis* p. 600 fig. 36, *T. systematicus* p. 601 fig. 37, **spp. n.**, L. Cal. R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12**.

PRODIDOMIDAE.

Pericuris **gen. n.** p. 608 for type *P. insularis* **sp. n.** p. 609 figs. 42–45 L. Cal. R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12**.

DRASSIDAE.

(Including Clubionidae.)

Anyphaena johnstoni **sp. n.** L. Cal. R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12** p. 662 fig. 105–106.

Apodrassodes **gen. n.** p. 165 for type *A. singularis* **sp. n.** p. 166 fig. 50 Brazil, VELLARD Arch. Inst. Vital. Brazil **2**.

Cesonia classica **sp. n.** L. Cal. R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12** p. 619 fig. 57.

Chemnis monisticus **sp. n.** L. Cal., R. V. Chamberlin Proc. Cal. Acad. Sci. **12** p. 667 fig. 111.

Clubiona decora in Dorset, new to Britain p. 106, Jackson **110.**—*C. kulczynskii* descript. p. 113 fig. 16, Schenkel **187.**—*C. neocaledonica* **sp. n.** N. Caledonia, Berland Nova Caledonia **3** p. 234 fig. 164–167.—*C. agrastis* **sp. n.** Massachusetts, Emerton Psyche **31** p. 144 figs.

Corinna epicuriana **sp. n.** L. Cal. R. V. Chamberlin Proc. Cal. Acad. Sci. **12** p. 669 fig. 113.

Drassodes ciusi **sp. n.** N. Caledonia, Berland Nova Caledonia **3** p. 192.

Drassus lapidicola copulation p. 92, Gerhardt **87.**

Drassyllus empiricus p. 628 fig. 66, *D. rationalis* p. 629 fig. 67, **spp. n.**, L. Cal. R. V. Chamberlin Proc. Cal. Acad. Sci. **12.**

Gayenna absoluta **sp. n.** L. Cal., R. V. Chamberlin Proc. Cal. Acad. Sci. **12** p. 661 figs. 103–104.

Gnaphosa occidentalis in Cornwall new to England p. 104 described p. 118, Jackson **110.**—*G. suchuana* **sp. n.** S. China, R. V. Chamberlin P. U. S. N. Mus. **63** art. 13 p. 3 fig.—*G. synthetica* **sp. n.** L. Cal. R. V. Chamberlin Proc. Cal. Acad. Sci. **12** p. 620 figs. 59–60.

Hemicloea pacifica **sp. n.** Loyalty Is., Berland Nova Caledonia **3** p. 187 fig. 44.

Heteropoda robusta **sp. n.** Siju cave, Assam Fage Rec. Ind. Mus. **26** p. 66 figs.

Hypodrassodes canacus p. 190 figs. 46–50, *H. ignambensis* p. 191 fig. 51, **spp. n.**, N. Caledonia, Berland Nova Caledonia **3.**

Isopoda neocaledonica **sp. n.** N. Caledonia, Berland Nova Caledonia **3** p. 231 fig. 161.

Megamyrmecion asceticum p. 615 fig. 52, *M. pessimisticum* p. 616 fig. 53, *M. naturalisticum* p. 617 figs. 54–55, *M. nesiotes* p. 618 fig. 56, **spp. n.**, L. Cal. R. V. Chamberlin Proc. Cal. Acad. Sci. **12.**

Myrmecium mendax **sp. n.** Brazil, Mello-Leitão Bol. Soc. Entom. Brasil no. **56** p. **11.**

Nodocion pragmaticus p. 612 fig. 47, *N. electicus* p. 613 fig. 48, *N. realisticus* p. 613 fig. 49, *N. syntheticus* p. 614 figs. 50–51, **spp. n.**, L. Cal., R. V. Chamberlin Proc. Cal. Acad. Sci. **12.**

Olios (*Macrinus*) *extensus* p. 226 figs. 139–145, *O.* (*Olios*) *neocaledonicus* figs. 146–147, *O.* (*Olios*) *oubatchensis* figs. 148–150 p. 227, *O.* (*Olios*) *fulvithorax* p. 229 fig. 151, *O.* (*Sarotes*) *maculatus* figs. 155–156, *O.* (*S.*) *canalae* figs. 157–158 p. 230, *O.* (*S.*) *humboldtianus* fig. 159, *O.* (*S.*) *monticola* fig. 160 p. 231, **spp. n.**, N. Caledonia, Berland Nova Caledonia **3.**

Olios positivus p. 657 fig. 99, *O. scepticus* p. 658 fig. 100, *O. naturalisticus*, *O. pragmaticus* p. 659 figs. 101 102, **spp. n.**, L. Cal., R. V. Chamberlin Proc. Cal. Acad. Sci. **12.**—*O. vitiosus* p. 162 fig. 47, *O. lepidus* p. 163 fig. 48, **spp. n.**, Brazil, *O. attractus* female described p. 164 fig. 49, Vellard Arch. Inst. Vital. Brazil **2.**

Phrurolithus florentinus **sp. n. nr.** Florence, Caporiacco Mem. Ent. Soc. Ital. **2** p. 204 fig.

Rebilus obscurus **sp. n.** N. Caledonia, Berland Nova Caledonia **3** p. 188 fig. 45.

Sergiolus atomisticus **sp. n.** L. Cal., R. V. Chamberlin Proc. Cal. Acad. Sci. **12** p. 610 fig. 46.

Syspira analytica p. 663 fig. 107, *S. electica* p. 664 fig. 108, *S. synthetica* p. 665 figs. 109–110, **spp. n.**, L. Cal., R. V. Chamberlin Proc. Cal. Acad. Sci. **12.**

Zelotes monarchus p. 621 fig. 61, *Z. catholicus* p. 622 fig. 62, *Z. calvanisticus* p. 623 fig. 63, *Z. protestans* p. 624 fig. 64, *Z. reformans* p. 625 fig. 65 L. Cal., **spp. n.**, R. V. Chamberlin Proc. Cal. Acad. Sci. **12.**

Zora alpina Tyrol p. 935, *Z. distincta* Galicia p. 937, **spp. n.**, Kulczyński Bul. Intern. Krakow **1914** B.

Zoroides **gen. n.** for *Z. dalmasi* **sp. n.** N. Caledonia, Berland Nova Caledonia **3** p. 235 figs. 168–173.

Dictynidae.

Amaurobius hercegovinensis Hercegovina p. 901 figs. 1–5 ; *A. minor* p. 904 fig. 6 Croatia, **spp. n.**, Kulczyński Bul. Intern. Acad. Krakow for **1914** B 1915.

Aphyctoschaema alacris **sp. n.** N. Caledonia, BERLAND Nova Caledonia **3** p. 183 figs. 35–37.

Auximus lanceolatus **sp. n.** Brazil, VELLARD Arch. Inst. Vital. Brazil **2** p. 161 fig. 46.

Dictyna flavescens in Durham new to England p. 109, JACKSON **110.**—*D. remota* **sp. n.** Daphne I. Galapagos, BANKS Zoologica **5** p. 97 fig. 17.—*D. mulegensis* p. 582 figs. 7–9, *D. secuta* p. 583 fig. 10, *D. parcita* p. 583 fig. 11, **spp. n.,** R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12.**

Epimecinus longipes p. 178 figs. 23–25, *E. magnus* p. 179 figs. 26–30, *E. humilis* p. 180 figs. 31–32, **spp. n.,** New Caledonia, BERLAND Nova Caledonia **3.**

Lathys stigmatisata in Cornwall new to Britain p. 109, JACKSON **110.**

Oekobius isolatus **sp. n.** L. Cal., R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12** p. 584.

Parauximus austinensis **sp. n.** Texas, R. V. CHAMBERLIN P. U. S. N. Mus. **63** art. 13 p. 2.

Syrorisa alticola **sp. n.** N. Caledonia, BERLAND Nova Caledonia **3** p. 182 figs. 33, 34.

PSECHRIDAE.

Psechrus mimus **sp. n.** S. China, R. V. CHAMBERLIN P. U. S. N. Mus. **63** art. 13 p. 2.

ZODARIIDAE.

Cryptothele sundaica habits, ABRAHAM **2.**

Homalonychus positivus p. 630 fig. 68, *H. theologus* p. 631 fig. 69, **spp. n.,** L. Cal., R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12.**

Storena rainbowi p. 194 figs. 57–59, *S. silvicola* p. 195 fig. 60, *S. canalensis* p. 195 fig. 61, **spp. n.,** N. Caledonia, BERLAND Nova Caledonia **3.**

HERSILIIDAE.

Tama crucifera **sp. n.** Brazil, VELLARD Arch. Inst. Vital. Brazil **2** p. 140.

PHOLCIDAE.

Hoplopholcus forskäli sexual relations p. 144 fig. 8, GERHARDT **87.**

Pholcus opilionoides sexual relations p. 140 fig. 7, GERHARDT **87.**

Psilochorus dogmaticus p. 633, *P. agnosticus* p. 634 figs. 73–74 fig. 72, **spp. n.,** L. Cal., R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12.**

THERIDIIDAE.

Anibontes **gen. n.** for *A. mimus* **sp. n.** Louisiana, R. V. CHAMBERLIN P. U. S. N. Mus. **63** art. 13 p. 6 figs.

Argyrodes neocaledonicus **sp. n.** New Caledonia, BERLAND Nova Caledonia **3** p. 198 figs. 66–71.—*A. biclavis* **sp. n.** Louisiana *A. fur* cocoon, R. V. CHAMBERLIN P. U. S. N. Mus. **63** art. 13 p. 5 figs.

Bathyplantes sarasini **sp. n.** New Caledonia, BERLAND Nova Caledonia **3** p. 205 figs. 87–90.—*B. erythroides* **sp. n.** Louisiana, R. V. CHAMBERLIN P. U. S. N. Mus. **63** art. 13 p. 7 figs.

Ceraticelus nubiliceps **sp. n.** Louisiana, R. V. CHAMBERLIN P. U. S. N. Mus. **63** art. 13 p. 8 figs.—*C. nesiotes* p. 641 figs. 81–84 **sp. n.** L. Cal., CROSBY in CHAMBERLIN Proc. Cal. Acad. Sci. **12.**

Diplocephalus helleri new to Switzerland p. 88, *D. fuscipes* p. 89 fig. 3, *D. castaneiceps* p. 89 figs. 4, 3, SCHENKEL **187.**—*D. hungaricus* **sp. n.** Hungary KULCZYŃSKI Bul. Intern. Krakow **1914** B p. 923 fig. 36–42.

Enoplognatha maritima in England, *E. mandibularis* new to Britain p. 112, JACKSON **110.**

Erigone arctica in Spitsbergen p. 78, JACKSON **109.**—*E. dentipalpis* semimarine habitat, BERLAND **15.**—*E. eschatologica* L. Cal. **sp. n.,** CROSBY in CHAMBERLIN Proc. Cal. Acad. Sci. **12.**

Euryopis spinigera in Massachusetts p. 142 figs., EMERTON **73.**

Graphomoa **gen. n.** p. 7 for *G. theridioides* **sp. n.** Louisiana p. 8 figs., R. V. CHAMBERLIN P. U. S. N. Mus. **63** art. 13.

Latrodectus mactans life history observations, RAU **166.**

Leptyphantes sennae **sp. n.** N. Italy, CAPORIACCO Mem. Soc. Ent. Ital. 1 p. 79 2 figs.—*L. pillichii* **sp. n.** Hungary, KULCZYŃSKI Bul. Intern. Krakow

1914 B p. 931 fig. 64.—*L. neocaledonicus* **sp. n.** N. Caledonia, BERLAND Nova Caledonia **3** p. 204 figs. 83–86.—*L. handscheini* p. 104 fig. 14, *L. variabilis* p. 105 fig. 15, SCHENKEL **187.**

Linyphia carnica **sp. n.** N. Italy, CAPORIACCO Mem. Soc. Ent. Ital. **1** p. 81 fig.

Lophocarenum stramineum in Cornwall new to England p. 112, JACKSON **110.**—*L. hortense* **sp. n.** Massachusetts, EMERTON Psyche **31** p. 143 figs.

Micronecta bowditchiae **sp. n.** Maine, BISHOP New York State Mus. Bul. no. 251 appendix p. 26 figs.

Pseudanapis insolitus **sp. n.** New Caledonia, BERLAND Nova Caledonia **3** p. 200 figs. 75–82.

Teutana nesiotes **sp. n.** L. Cal., R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12** p. 639 fig. 80.

Theridion varians sexual relations p. 133, GERHARDT **87.**—*T. bellicosum* new to Switzerland p. 82, SCHENKEL **187.**—*T. terrestre* **sp. n.** Massachusetts EMERTON Psyche **31** p. 140 fig.—*T. punctipes* p. 29, *T. stanfordi*, *T. berkeleyi* p. 30 figs., **spp. n.,** EMERTON Pan Pacific Entomologist **1.**—*T. positivum* p. 636 fig. 75, *T. analyticum* p. 637 figs. 76–77, *T. geminipunctatum* p. 638 figs. 78–79, **spp. n.,** L. Cal., R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12.**

ARGIOPIDAE.

(= Epeiridae.)

Arachnura simoni **sp. n.** N. Caledonia, BERLAND Nova Caledonia **3** p. 218 figs. 122–123.

Aranea multiplicans p. 18 fig., *A. fratella* p. 19, *A. pia* p. 19 fig. all S. China, R. V. CHAMBERLIN P. U. S. N. M. **63** art. 13.—*A. neocaledonicus* p. 221 figs. 124–125, *A. canalae* figs. 126–127, *A. yatei* figs. 128–130 p. 222 N. Caledonia, BERLAND Nova Caledonia **3.**

Argiope viabilior, *A. aequior*, **spp. n.,** S. China p. 16 figs., *A. amoena* colour in life p. 15, R. V. CHAMBERLIN P. U. S. N. Mus. **63** art. 13.

Centromerus incultus redescribed p. 119, JACKSON **110.** — *C. subalpinus* structure, etct., p. 97 figs. 10 11, SCHENKEL **187.**

Ceratinopsis tarsalis **sp. n.** Rhode I., EMERTON Psyche **31** p. 141 fig.

Chinestella **gen. n.** for *C. gisti* **sp. n.** S. China, R. V. CHAMBERLIN P. U. S. N. Mus. **63** art. 13 p. 20 fig.

Cnephalocotes elegans new to Ireland p. 52, PACK-BERESFORD **156.**

Cyrtophora sellata in Brazil, range, habits and web, VELLARD **228.**

Epeira diademata locomotion studies, KÄSTNER **119.**—*E. grayi* killed and eaten by an Asilid Fly in Brazil, BRISTOWE **29.**

Eucta chinensis **sp. n.** S. China, R. V. CHAMBERLIN P. U. S. N. Mus. **63** art. 13 p. 12 fig.—*E. rouxi* **sp. n.** N. Caledonia, BERLAND Nova Caledonia **3** p. 209 fig. 104–107.

Eustala anastera buliafera, *E. a. leuca* L. Cal. **subspp. n.,** R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12** p. 650.

Gasteracantha nabona **sp. n.** S. China, R. V. CHAMBERLIN P. U. S. N. M. **63** art. 13 p. 22.

Gonatium isabellinum sexual relations p. 131 fig. 6, GERHARDT **87.**

Gongylidium rufipes sex relations p. 129, fig. 5, GERHARDT **87.**

Grammonata capitata **sp. n.** Connecticut EMERTON Psyche **31** p. 141 fig.

Hilaira tatrica **sp. n.** Galicia, KULCZYŃSKI Bul. Intern. Krakow **1914** B p. 927 figs. 43, 45, 47, 49, 60.—*H. rudis* fig. 7, *H. montigena* fig. 8 p. 95, SCHENKEL **187.**

Larinia cymotypa **sp. n.** L. Cal., R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12** p. 649 fig. 93.

Leucauge retracta, *L. veterascens*, **spp. n.,** S. China, R. V. CHAMBERLIN P. U. S. N. Mus. **63** art. 13 p. 13 figs.

Macragus pusillus **sp. n.** Switzerland, SCHENKEL Verh. Natf. Ges. Basel **34** p. 99 figs. 12, 13.

Micracantha review of species with key and many figures p. 77, *M. pfannli* p. 111 fig. 13 Paraguay, *M. henseli* p. 121 fig. 19 Brazil, *M. annulata* p. 149 fig. 31 Brazil, *M. dahli* p. 150 fig. 32 Venezuela. **spp. n.,** REIMOSER Verh. Zool. Bot. Ges. Wien **67.**

Micryphantes nigripes in Spitsbergen p. 77, JACKSON **109.**

Miranda zabonica **sp. n.** S. China, R. V. CHAMBERLIN P. U. S. N. Mus. **63** art. 13 p. 17 fig.

Nesticus alteratus p. 14 fig. S. China, *N. suggerens* p. 15 figs. Louisiana, **spp. n.**, R. V. Chamberlin P. U. S. N. Mus. **63** art. 13.

Orsinome sarasini **sp. n.** N. Caledonia. Berland Nova Caledonia **3** p. 210 figs. 108–112.

Pachygnatha listeri sex relations p. 126 fig. 4, Gerhardt **87.**

Phonognatha joannae **sp. n.** p. 213 figs. 118–120, *P. graeffei neocaledonica* **var. n.** p. 212 figs. 113–117 New Caledonia, Berland Nova Caledonia **3.**

Porrhomma egeria new to Switzerland p. 96 fig. 9, Schenkel **187.**

Robertus scoticus in Switzerland descript. p. 84 fig. 1, 2, Schenkel **187.**

Scotinotylus alpigena in Switzerland p. 91-fig. 6, Schenkel **187.**

Tetragnatha conformans p. 9 figs., *T. sociella* p. 10 figs., *T. plena* p. 11 figs., *T. retinens* p. 11 figs., *T. aliens* p. 12 figs. all S. China, R. V. Chamberlin P. U. S. N. Mus. **63** art. 13.—*T. oubatchensis* figs. 91–95, *T. noumeensis* figs. 96–103, **spp. n.**, N. Caledonia, Berland Nova Caledonia **3** p. 207.—*T. eremita* **sp. n.** L. Cal., R. V. Chamberlin Proc. Cal. Acad. Sci. **12** p. 645 figs. 89–90.

Trichopterna sp. in Estland, Esthonia, described p. 58, Dampf **65.**

Vendilgardia assamensis **sp. n.** Siju Cave Assam, Fage Rec. Ind. Mus. **26** p. 64 fig.

Uloboridae.

Hyptiotes paradoxus general habits and sex relations p. 115, Gerhardt **87.**

Uloborus walckenaerius general habits and sexual relations p. 108 fig. 3, Gerhardt **87.**—*U. dissimilis* **sp. n.** N. Caledonia, Berland Nova Caledonia **3** p. 176 figs. 18–20.—*U. oweni* p. 579 fig. 4, *U. crepidinis* p. 580 fig. 5, *U. saphes* p. 581 fig. 6, **spp. n.**, L. Cal., R. V. Chamberlin Proc. Cal. Acad. Sci. **12.**

Thomisidae.

Camaricus castaneiceps **sp. n.** N. Caledonia, Berland Nova Caledonia **3** p. 224 figs. 136–138.

Horodromus **gen. n.** p. 653 for *H. absolutus* **sp. n.** p. 654 fig. 94 L. Cal., R. V. Chamberlin Proc. Cal. Acad. Sci. **12.**

Misumena calycina habits, sex dimorphism, copulation 2 figs. p. 100, Gerhardt **87.**

Oxyptila sanctuaria new to Ireland p. 50, Pack-Beresford **156.**

Philodromus amitinus S. China p. 22 fig., *P. louisianus* Louisiana p. 23 fig., R. V. Chamberlin P. U. S. N. Mus. **63** art. 13.

Platythomisus octomaculatus in Singapore descript. habits, Abraham **2.**

Selenops actophilus p. 655 figs. 95–96, *S. nesophilus* p. 656 figs. 97–98, **spp. n.**, L. Cal., R. V. Chamberlin Proc. Cal. Acad. Sci. **12.**

Xysticus viaticus sexual relations p. 97, Gerhardt **87.**—*X. cristatus* note on female p. 112, Schenkel **187.**—*X. gortanii* **sp. n.** N. Italy, Caporiacco Mem. Soc. Ent. Ital. **1** p. 89 fig.

Agelenidae.

Cambridgea simoni **sp. n.** N. Caledonia. Berland Nova Caledonia **3** p. 237 figs. 174–182.

Coelotes kulianganus **sp. n.** S. China, R. V. Chamberlin P. U. S. N. Mus. **63** art. 13 p. 24 figs.

Tegenaria domestica spermatogenesis and the Golgi apparatus, Sokólska **209.**

Pisauridae.

The Pisaurid Spiders of the United States, Bishop **20.**

Dolomedes fimbriatus copulation, Bonnet **26.**—*D. insurgens* p. 25, fig., *D. chinesus* p. 26 fig., **spp. n.**, S. China, R. V. Chamberlin P. U. S. N. Mus. **63** art. 13.—*D. titan* p. 240 figs. 186–188, *D. neocaledonicus* (Simon M.S.) p. 241 figs. 189–191, *D. lafoensis* p. 243 fig. 192–194 New Caledonia, Berland Nova Caledonia **3.**—*D. okefinokensis* Georgia U.S.A. p. 38 figs., *D. albiclavius* Missouri p. 56 figs., *D. fulviatronotatus* Illinois p. 59 figs., **spp. n.**, Bishop Bul. New York State Mus. no. **252.**

Nilus ornatus **sp. n.** Loyalty Is., Berland Nova Caledonia **3** p. 239 figs. 183–185.

Pelopatis **gen. n.** for type *Tetragonophthalma undulata* keys, Bishop Bul, New York State Mus. no. 252 p. 21.

Pisaura mirabilis copulation p. 89, Gerhardt **87.**

Pisaurina mira descript. variation synon. habits, etct., p. 23 figs., BISHOP **20.**

Thaumasia peregrinus **sp. n.** Arkansas, BISHOP Bul. New York State Mus. no. **252** p. 62 figs.

LYCOSIDAE.

On the Indian Spiders of the family Lycosidae, with descriptions, keys, etct., GRAVELY **94.**

Hippasa himalayensis p. 593 fig. 1A, Himalaya, *H. nilgiriensis* p. 593 fig. 1D Nilgiris, *H. loundesi* p. 594 fig. 1E Shevaroy Hills, *H. madraspatana* p. 595 fig. 1J Madras city, **spp. n.,** GRAVELY Rec. Ind. Mus. **26.**

Lycosa (*Tarentula*) *galilaei* **sp. n.** nr. Florence, CAPORIACCO Mem. Soc. Ent. Ital. **2** p. 209 fig.—*L. barnesi* p. 599 fig. 3B Malabar, *L. bistriata* p. 600 Mysore, *L. kempi* p. 602 fig. 3F Sikkim, *L. himalayensis* p. 603 fig. 3G Sikkim, *L. punctipes* p. 603 fig. 3I Bangalore, *L. moulmeinensis* p. 604 fig. 4A Moulmein, *L. carmichaeli* p. 604 fig. 4B Sikkim, *L. fetcheri* p. 606 fig. 4F N.W. Frontier Prov., *L. sutherlandi* p. 606 fig. 4G Sikkim, *L. mackenziei* p. 606 fig. 4H Mysore, *L. annandalei* p. 606 fig. 4I Madras, *L. quadrifer* p. 608 fig. 4K Ceylon, **spp. n.,** GRAVELY Rec. Ind. Mus. **26.**—*L. konei* **sp. n.** N. Caledonia, BERLAND Nova Caledonia **3** p. 245 figs. 197–199.—*L. huberti* p. 28 fig., *L. acompa* p. 29 fig., *L. episima* p. 30 fig., *L. suprenans* p. 30 fig., **spp .n.,** Louisiana R. V. CHAMBERLIN P. U. S. N. Mus. **63** art. 13.

Orinocosa oriens **sp. n.** S. China, R. V. CHAMBERLIN Proc. U. S. N. Mus. **63** art. 13 p. 31 figs.

Pardosa atropalpis Madras city fig. 5B., *P. oakleyi* Nilgiris fig. 5C, *P. leucopalpis* Madras fig. 5D all p. 610, GRAVELY Rec. Ind. Mus. **26.**—*P. orthodox* **sp. n.** L. Cal., R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12** p. 671 fig. 114.

Sosippus pragmaticus **sp. n.** Sonora Mexico, R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12** p. 674 fig. 117.—*S. mimus* **sp. n.** Louisiana, R. V. CHAMBERLIN P. U. S. N. Mus. **63** art. 13 p. 27.

Teippus **gen. n.** for *T. lamprus* **sp. n.** Louisiana, R. V. CHAMBERLIN P. U. S. N. Mus. **63** art. 13 p. 28.

Venonia himalayensis **sp. n.** Sikkim, GRAVELY Rec. Ind. Mus. **26** p. 608.

OXYOPIDAE.

Himataliva positiva **sp. n.** Sonora, R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12** p. 677 fig. 118.

Oxyopeidon absolutum **sp. n.,** *O. a. obliquum* **subsp. n.** L. Cal., R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12** p. 676.

Oxyopes actophilus **sp. n.** L. Cal., R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12** p. 675.

SALTICIDAE.

(= Attidae.)

Dendryphantes louisianus **sp. n.** Louisiana, R. V. CHAMBERLIN P. U. S. N. Mus. **63** art. 13 p. 34 fig.—*D. carmenensis* p. 682 figs. 122–123, *D. chera* p. 683 fig. 124, *D. melanomerus* p. 684 figs. 125–126, *D. zygoballoides* p. 685 figs. 127–129, *D. diplacis* p. 686 figs. 130–132, **spp. n.,** L. Cal., R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12.**—*D. rudis* fig. 18, *D. hastatus* fig. 17 p. 122, SCHENKEL **187.**

Evophrys testaceozonata **sp. n.** N. Italy, CAPORIACCO Mem. Soc. Ent. Ital. **1** p. 10 fig.

Heliophanus **sp. n.** ? p. 121, SCHENKEL **187.**

Hyllus mimus **sp. n.** S. China, R. V. CHAMBERLIN Proc. U. S. N. Mus. **63** art. 13 p. 33 fig.

Icius ildefonsus **sp. n.** L. California, R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12** p. 679 fig. 119.

Paradescanso **gen. n.** p. 33 for *P. fallax* **sp. n.** p. 34 Brazil, VELLARD Arch. Inst. Vital. Brazil **2.**

Pellenes texanus **sp. n.** Texas, R. V. CHAMBERLIN P. U. S. N. Mus. **63** art. 13 p. 35 fig.—*P. ammophilus* p. 689 figs. 134–135, *P. anepsius* p. 690 fig. 136 *P. angelus* p. 691 fig. 137, *P. corticolens* p. 692 fig. 138, *P. polius* p. 692 fig. 139, *P. pyrrithrix* p. 693 fig. 140, **spp. n.,** L. Cal., R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12.**

Phanias distans **sp. n.** S. Seymour Galapagos, BANKS Zoologica **5** p. 98 fig. 18.

Sassacus vanduzeei **sp. n.** L. Cal., R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12** p. 687 fig. 133.

Trite ignipilosus **sp. n.** N. Caledonia, BERLAND Nova Caledonia **3** p. 251 figs. 270-213.

Wala poenitens **sp. n.** Sonora, R. V. CHAMBERLIN Proc. Cal. Acad. Sci. **12** p. 680.

SOLIFUGAE.

Galeodes truculentus description, measurements, taxonomy, with figure, BIRULA **18.**

PSEUDOSCORPIONES.

The poison glands and venom of Pseudoscorpions, CHAMBERLIN **41.**

Apocheiridium **gen. n.** p. 34 for type *A. ferumoides* **sp. n.** California p. 35 figs., also *A. mormon* **sp. n.** Idaho p. 36 figs., J. C. CHAMBERLIN Pan Pacific Entom. **1.**

Chelanops (*Lamprochernes*) *macrochelatus* from Chile external anat. and figs. p. 190, J. C. CHAMBERLIN **45.**

Chelifer pallipes in Ants' nests in New Zealand, W. W. SMITH **208.**—*C.* (*Atemnus*) *goniothorax* **sp. n.** Mabira Uganda, REDIKORZEV Rev. Russe Ent. **18** p. 188 2 figs.

Chthonius dilatimanus Kenya Col. p. 193 3 figs., *C. sokolovi* Uganda p. 195 3 figs., *C. semidentatus* Kenya Col. p. 197 3 figs., **spp. n.,** REDIKORZEV Rev. Russe Ent. **18.**—*C. sumatraensis* **nom. n.** for *C. curvidigitatus* Simon preocc. p. 186, *C. chilensis* **sp. n.** Chiloe I. p. 187 figs., J. C. CHAMBERLIN Rev. Chilena **27.**

Garypus sini popular account, with figs., J. C. CHAMBERLIN **42.**

Hesperochernes **gen. n.** p. 89 for *H. laurae* **sp. n.** p. 90 figs. nest of *Vespa*, California, J. C. CHAMBERLIN Pan Pacific Entom. **1.**

Ideoroncus africanus **sp. n.** Kenya Colony, REDIKORZEV Rev. Russe Ent. **18** p. 190 2 figs.

Obisium dogieli **sp. n.** Uganda, REDIKORZEV Rev. Russe Ent. **18** p. 192 2 figs.—*O.* (*Roncus*) *menozzii* **sp. n.** Italy, CAPORIACCO Boll. Soc. Ent. Ital. **55** p. 132 fig.—*O.* (*Blothrus*) *nonidezi* p. 101 fig. 1, *O.* (*B.*) *breuili* p. 103 fig. 2 caves of Navarre, Spain, BOLIVAR Bol. Soc. Esp. N. H. **24.**

OPILIONES.

(= Phalangidea.)

A systematic account of the Opiliones of the world with general notes on their outer morphology, ROEWER **175.**

List of the Opiliones of Florence and neighbourhood, CAPORIACCO **38.**

Opiliones from Sumatra, ROEWER **178**; from Simalur I. off Sumatra, ROEWER **179**; from Java, ROEWER **180.**

The Opiliones of Brazil, MELLO-LEITÃO **136.**

SIRONIDAE.

Ogovea **nom. n.** for type *O. grossa* Hansen u. Soerensen p. 49, ROEWER **175.**

PHALANGODIDAE.

Baso **gen. n.** for *B. jacobsoni* **sp. n.** Sumatra p. 1092 fig. 1219, ROEWER **175.**

Belonisculus **gen. n.** for *B. jacobsoni* **sp. n.** Simalur I. p. 1090 fig. 1210, ROEWER **175.**

Beloniscus simaluris **sp. n.** Simalur I. p. 1089, ROEWER **175.**

Eupodoctis **gen. n.** for *Sitalces indicus* Hirst p. 175, ROEWER **175.**

Ibalonianus **gen. n.** for *Ibalonius quadriguttatus* Hirst p. 149, ROEWER **175.**

Ibaloniellus **gen. n.** for *Ibalonius karschii* Loman p. 156, ROEWER **175.**

Ibalonioides **nom. n.** for *Ibalonius abnormis* Strand p. 172, ROEWER **175.**

Lomanius **gen. n.** for *Podoctis tridens* Loman p. 187, ROEWER **175.**

Metapellobunus **gen. n.** for type *Pellobunus unicolor* p. 111, ROEWER **175.**

Mimepedanus **gen. n.** for *Epedanus orientalis* Hirst p. 208, ROEWER **175.**

Neoibalonius **gen. n.** for *Paribalonius semperi* Roewer p. 157, ROEWER **175.**

Pachylichus **gen. n.** for *Metapachylus rugosus* Banks and *californicus* p. 118, ROEWER **175.**

Paribalonius bimaculatus duplex var. **n.** Seychelles p. 156, ROEWER **175.**

Phalangodes laciniosa p. 9 figs., *P. spinturnix* p. 10 figs., *P. acanthina* p. 11 figs., **spp. n.**, S.E. U.S.A., with key to genus, CROSBY & BISHOP J. Elisha Mit. Soc. **40.**

Podoctinus **gen. n.** for *Podoctis willeyi* Hirst p. 178, ROEWER **175.**

Rivetinus **gen. n.** p. 131 for *R. minutus* **sp. n.** p. 132 fig. 7 Ecuador, ROEWER **176.**

Sarasinicinae **subf. n.** for *Sarasinica* Strand, p. 193, ROEWER **175.**

Sibolgia **gen. n.** for *S. jacobsoni* **sp. n.** Sumatra p. 1091 fig. 1211, ROEWER **175.**

Sitalcicus **gen. n.** for *Sitalces gardineri* Hirst p. 158, ROEWER **175.**

Stygnommatinae **subfam. n.** for *Stygnomma*, Roewer p. 144, ROEWER **175.**

Tithaeus jacobsoni **sp. n.** Sumatra p. 1090, ROEWER **175.**

Yania **gen. n.** p. 129 for *Y. flavolimbata* **sp. n.** Ecuador p. 130 fig. 6, ROEWER **176.**

ASSAMIIDAE.

Assamiella **gen. n.** for *Assamia marginata* Roewer p. 240, ROEWER **175.**

Euselenca **gen. n.** for *Selenca gracilis* Soerensen p. 282, ROEWER **175.**

Euwintonius **gen. n.** for *E. continentalis* **sp. n.** Australia p. 234, ROEWER **175.**

Fakoa **gen. n.** for *Acanthophrysella spinulata* Roewer p. 277, ROEWER **175.**

Heteropygoplus **gen. n.** for *Apygoplus sublaevis* Roewer p. 236, ROEWER **175.**

Maracandellus **gen. n.** for *Maracandus rhinoceros* Thorell p. 245, ROEWER **175.**

Metachilon **gen. n.** for *Chilon armatus* Roewer p. 279, ROEWER **175.**

Metahyamus **gen. n.** for *M. jacobsoni* **sp. n.** Simalur I. p. 1093, ROEWER **175.**

Metassamia **gen. n.** for *Assamia sexdentata*, THORELL p. 242 ROEWER **175.**—*M. septemdentata* **sp. n.** Siju cave, Assam, ROEWER Rec. Ind. Mus. **26** p. 69 1 fig; also p. 1096 ROEWER **175.**

Metapygoplus **gen. n.** for *Pygoplus intermedius* Loman p. 251, ROEWER **175.**

Metereca **gen. n.** for *Ereca abnormis* Roewer p. 262, ROEWER **175.**

Neopygoplus **gen. n.** for *N. jacobsoni* **sp. n.** Sumatra p. 1095, ROEWER **175.**

Nothippulus **gen. n.** for *Nothippus atroluteus* Roewer p. 235, ROEWER **175.**

Octobunus **gen. n.** for *O. singularis* **sp. n.** Australia p. 225, ROEWER **175.**

Parachilon **gen. n.** for *Chilon ferrugineus* Roewer p. 280, ROEWER **175.**

Paraseleuca **gen. n.** for *Seleuca aculeata* Roewer p. 283, ROEWER **175.**

Propygoplus **gen. n.** for *Parapygoplus maculatus* Roewer p. 249, ROEWER **175.**

Puria **gen. n.** for *Assamia dorsalis* Roewer p. 241, ROEWER **175.**

Sermowaius **gen. n.** for *Nothippus neoguinensis* Roewer p. 234, ROEWER **175.**

Sijucavernicus **gen. n.** for *S. kempi* **sp. n.** Siju cave, Assam, ROEWER Rec. Ind. Mus. **26** p. 70; also p. 1095, ROEWER **175.**

Simalurius **gen. n.** for *S. jacobsoni* **sp. n.** Simalur I. p. 1093, ROEWER **175.**

Sudaria **gen. n.** for *Apygoplus sarasinorum* Roewer p. 235; *S. jacobsoni* Sumatra, *S. simaluris* Simalur I., **spp. n.**, p. 1094, ROEWER **175.**

Wintonia **gen. n.** for *W. scabra* **sp. n.** Australia p. 248, ROEWER **175.**

COSMETIDAE.

Cynortellana **nom. n.** for *Cynorta bisignata* Banks p. 321, ROEWER **175.**

Discosomaticinae **subf. n.** for *Discomaticus* **gen. nom. n.** for *Discosoma cinctum* Perty p. 389, ROEWER **175.**

Eucynorta brasiliensis **sp. n.** Brazil, MELLO-LEITÃO Arch. Mus. Rio de J. **24** p. 111 fig.

Eucynortella juruensis **sp. n.** Brazil, MELLO-LEITÃO Arch. Mus. Rio de J. **24** p. 111 fig.

Eulibitia sexpunctata **sp. n.** Ecuador p. 127 fig. 4, ROEWER **176.**

Libitioides riveti **sp. n.** Ecuador p. 128 fig. 5, ROEWER **176.**

Metavonones orientalis fig., *M. barbacenensis*, **spp. n.**, Brazil, MELLO-LEITÃO Arch. Mus. Rio de J. **24** p. 109.

Rhancoides riveti **sp. n.** Ecuador p. 125 fig. 3, ROEWER **176.**

GONYLEPTIDAE.

Acanthogonyleptes pulcher fig. p. 146, MELLO-LEITÃO **136.**

Acutisoma inscriptum fig. p. 159, *A. monticola* fig. p. 160, *A. proximum* fig. p. 161, MELLO-LEITÃO **136.**

Ancistrotellus **nom. n.** for *Goniosoma squalidum* Perty p. 512, ROEWER **175.**

Ancistrotus nigricans fig. p. 165, MELLO-LEITÃO **136.**—*A. bristowei* **sp. n.** Brazil, MELLO-LEITÃO Ann. Soc. Ent. Paris **93** p. 183.

Asarcus pallidus **sp. n.** Brazil, MELLO-LEITÃO Arch. Mus. Rio de J. **24** p. 168.

Bourguyinae **subf. n.** pro *Bourguyia* **gen. n.** p. 128, for type *B. albiornata* fig. 10; also *B. curvipes* fig. 11 p. 129, **spp. n.**, MELLO-LEITÃO Arch. Mus. Rio de J. **24.**

Bristoweia **gen. n.** for *B. diamantinae* and *B. zorodes*, **spp. n.**, Brazil, MELLO-LEITÃO Ann. Soc. Ent. Paris **93** p. 180 fig.

Camposicola **gen. n.** p. 181 for *C. altifrons* **sp. n.** p. 182 figs. Brazil, MELLO-LEITÃO Ann. Soc. Ent. Paris **93.**

Coelopygus leucopheus fig. p. 170, MELLO-LEITÃO **136.**—*C. kochii* p. 522 fig. 653, *C. alter* p. 523 fig. 654, **spp. n.**, Brazil, ROEWER **175.**

Dyscocyrtoides **gen. n.** p. 130 for type *D. violaceus* p. 131 fig.; also *D. concolor* p. 131 fig. and *D. ypirangae* p. 132 Brazil, **spp. n.**, MELLO-LEITÃO Arch. Mus. Rio de J. **24.**

Discocyrtus moraesianus p. 125, *D. niger* p. 126 fig. Brazil, **spp. n.**, *D. vestitus* fig. p. 126, MELLO-LEITÃO Arch. Mus. Rio de J. **24.**

Eubalta **nom. n.** for *Balta meridionalis* Soerensen p. 409, ROEWER **175.**

Eugyndes **nom. n.** for *Gyndes reinhardi* Soerensen p. 397, ROEWER **175.**

Eusarcus curvispinosus **sp. n.** Brazil, MELLO-LEITÃO Arch. Mus. Rio de J. **24** p. 122.—*E. nigrimaculatus* **sp. n.** Brazil, MELLO-LEITÃO Ann. Soc. Ent. Paris **93** p. 181.

Gonyleptes atrus p. 140 fig., *G. fragilis* p. 141, *G. paucigranulatus* p. 143 all Brazil, **spp. n.**, *G. longicornis* fig. p. 142, *G. saprophilus* fig. p. 144, MELLO-LEITÃO Arch. Mus. Rio de J. **24.**

Gonyleptoides moreirae fig. p. 153, MELLO-LEITÃO **136.**

Ilhaia fluminensis figure p. 139, MELLO-LEITÃO **136.**

Liarthrodes 4-maculatus fig. p. 172, MELLO-LEITÃO **136.**

Lycomedicus **nom. n.** for *Gonyleptes asperatus* Gervais p. 442, ROEWER **175.**

Metagonyleptoides **gen. n.** for *M. anomalus* **sp. n.** Brazil, MELLO-LEITÃO Arch. Mus. Rio de J. **24** p. 145.

Metarthrodes farinosus fig. p. 173, MELLO-LEITÃO **136.**

Meteusarcoides mutilatus figured p. 120, MELLO-LEITÃO **136.**

Miradorius **nom. n.** for *Riveticranaus lutescens* ROEWER p. 569 **175.**

Mitobates stygnoides **sp. n.** Brazil, MELLO-LEITÃO Arch. Mus. Rio de J. **24** p. 163.

Neomitobates ornatus fig. p. 164, MELLO-LEITÃO **136.**

Neopucrolia bituberculata figured p. 116, MELLO-LEITÃO **136.**

Pachyloidellus tricalcaratus **sp. n.** Argentina p. 448 fig. 564, ROEWER **175.**

Paragonyleptes auricola **sp. n.** Brazil, MELLO-LEITÃO Ann. Soc. Ent. Paris **93** p. 183.—*P. fulvigranulatus* **sp. n.** Brazil p. 149 fig., *P. anomalus* fig. p. 148, *P. triacanthus* fig. p. 150, MELLO-LEITÃO Arch. Mus. Rio de J. **24.**

Peladoius **gen. n.** for *P. riveti* **sp. n.** p. 135 fig. 9 Ecuador, ROEWER **176.**

Progoniosoma cruciferum **sp. n.** Brazil p. 155, *P. macracanthum* fig. p. 157, MELLO-LEITÃO Arch. Mus. Rio de J. **24.**

Progonyleptoides cimex **sp. n.** Brazil, *P. inermis* fig., MELLO-LEITÃO Arch. Mus. Rio de J. **24** p. 136.

Prostygnellus **gen. n.** for *P. riveti* **sp. n.** p. 137 fig. 10 Ecuador, ROEWER **176.**

Riveticranaus **gen. n.** for *R. lutescens* **sp. n.** p. 139 fig. 11 Ecuador, ROEWER **176** [vide *Miradorius*].

Sadocus bufo **sp. n.** Brazil, MELLO-LEITÃO Arch. Mus. Rio de J. **24** p. 151 fig.

Santinezia **nom. n.** for *Inezia gigantea* Roewer p. 552, ROEWER **175.**

Sodreana sodreana fig. p. 176, MELLO-LEITÃO **136.**

Stignellus polyacanthus **sp. n.** Brazil, MELLO-LEITÃO Arch. Mus. Rio de J. **24** p. 178.

Therezopolis **gen. n.** for type *T. therazopolis* **sp. n.** Brazil, MELLO-LEITÃO Arch. Mus. Rio de J. **24** p. 133.

Triglochinura **gen. n.** for *T. curvispina* **sp. n.** Brazil, MELLO-LEITÃO Ann. Soc. Ent. Paris **93** p. 179.

Troya **gen. n.** p. 133 for *T. riveti* **sp. n.** p. 134 fig. 8, Ecuador, ROEWER **176.**

Uropachylus striatus figured p. 118, MELLO-LEITÃO **136.**

Weyhia spinifrons **sp. n.** Brazil, MELLO-LEITÃO Arch. Mus. Rio de J. **24** p. 137.

Ypiranga ypiranga figured p. 121, MELLO-LEITÃO **136.**

TRIAENONYCHIDAE.

Cyptobunus Banks is a synonym of *Selerobunus*, CROSBY & BISHOP **61.**

Equitius affinis **sp. n.** Queensland p. 607 fig. 760, ROEWER **175.**

Lacinius insularis Crete p. 741 fig. 918, *L. gallipoliensis* Gallipoli p. 741 fig. 919, *L. armatus* Algeria p. 742 fig. 920, *L. denticulatus* Algeria p. 742 fig. 921, **spp. n.,** ROEWER **175.**

NEMASTOMATIDAE.

Nemastoma lugubre gland-bristles, "Kugel-haare," RIMSKY-KORSAKOW **174.**—*N. gallwitzi* p. 667, *N. mackenseni*, *N. nervosum* p. 668 in Serbia, ROEWER **175.**—*N. kepharti* **sp. n.** N. Carolina, CROSBY & BISHOP J. Elisha Mitch. Soc. **40** p. 24 figs.

ACROPSOPILIONIDAE.

Acropsopilionidae **fam. n.** for *Acropsopilio* Silv. p. 678, ROEWER **175.**

ISCHYROPSALIDAE.

Ischyropsalis general anatomy and affinities of the genus, MÜLLER **144.**—*I. taunica* Taunus, Germany p. 683 fig. 850, *I. plicata*, Karinthia Austria p. 692 fig. 865, *I. lusitanica* Portugal p. 692 fig. 696, **spp. n.,** ROEWER **175.**—*I. herbsti* descript. synon. p. 124, SCHENKEL **187.**

Sabacon mitchelli **sp. n.** N. Carolina, CROSSBY & BISHOP J. Elisha Mitchell Soc. **40** p. 23 fig.

PHALANGIDAE.

Aurivilliola aurivillii bispinosa **var. n.** Java p. 1003, ROEWER **175.**

Bunochalis **nom. n.** for *Phalangium spiniferum* Simon p. 767, ROEWER **175.**—*B. longipes*, *B. brevipes*, **spp. n.,** Teneriffe p. 768 figs. 942–943, ROEWER **175.**

†*Caddo dentipalpus* (Koch & Barendt) redescribed and referred to this genus with figs., BISHOP & CROSSBY **21.**

Ceratobunoides **gen. n.** for *C. sumatranus* **sp. n.** Sumatra p. 1063, ROEWER **175.**

Cosmobunus unifasciatus **sp. n.** Spain p. 873, ROEWER **175.**

Crassicippus figuratus **sp. n.** Malacca p. 1006 fig. 1123, ROEWER **175.**

Cristina vorbecki **sp. n.** Tanganyika Terr. p. 808 fig. 993, ROEWER **175.**

Dacnopilio carthaginiensis **sp. n.** Tunisia p. 797 fig. 977, ROEWER **175.**

Dentobunus quadridentatus Malacca p. 944 fig. 1079, *D. aurolucens* Sumatra p. 948 fig. 1083, **spp. n.,** ROEWER **175.**

Euceratobunus **gen. n.** for *Ceratobunus pulcher* With. p. 1052, ROEWER **175.**

Eudasylobus ferrugineicoxis Lugano, *E. ligustricus* Liguria, *E. sardiniensis* Sardinia p. 836 fig. 1012, **spp. n.,** ROEWER **175.**

Eugagrella muara Sumatra fig. 1130, *E. trimaculata* Sumatra fig. 1131, *E. palliditarsus*, *E. simaluris* fig. 1132, all p. 1026, *E. jacobsoni* p. 1027 Simalur I., **spp. n.,** ROEWER **175.**

Euphalangium altaicum **sp. n.** Altai p. 765, ROEWER **175.**

Gagrella cruciata **nom. n.** pro *G. crux* Roewer preocc. Burma p. 966; *G. foveolata* **sp. n.** Sumatra p. 975, ROEWER **175.**

Gagrellula simaluris Simalur I. nr. Sumatra p. 1014, *G. aurilimbata* Malacca p. 1017 fig. 1127, ROEWER **175.**

Graecophalangium **gen. n.** for *G. atticum* **sp. n.** Attica p. 755 fig. 932, ROEWER **175.**

Harmanda triseriata **sp. n.** Malacca p. 1060 fig. 1154, ROEWER **175.**

Liobunum lusitanicum **sp. n.** Portugal p. 888, ROEWER **175.**—*L. aurugineum* p. 14 fig., *L. speciosum* p. 15 fig, *L. uxorium* p. 18 figs., *L. cretatum* p. 19 fig. **spp. n.,** S.E. U.S.A., with key to genus, CROSBY & BISHOP J. Elisha Mitch. Soc. **40.**

Megabunus rhinoceros note p. 124, SCHENKEL **187.**

Mesosoma ephippiatum **sp. n.** Illinois U.S.A. p. 921, ROEWER **175.**

Metagagrella formosa bispinosa **var. n.** Formosa p. 1001, ROEWER **175.**

Metaphalangium romanum Rome, *M. maroccanum* Morocco, **spp. n.,** p. 761, ROEWER **175.**

Metaplatybunus creticus **nom. n.** Crete p. 852 fig. 1023, ROEWER **175.**

Neosclerosoma **gen. n.** for *Sclerosoma sardum* Thorell p. 703, ROEWER **175.**

Odiellus **nom. n.** for *Phalangium spinosum* Bosc. p. 724, ROEWER **175.**—*O. granulatus* S. Russia p. 733 fig. 908, *O. toscanus* Tuscany p. 734 fig. 909, **spp. n.,** ROEWER **175.**—*O. nubivagus* **sp. n.** N. Carolina, CROSBY & BISHOP J. Elisha Mitch. Soc. **40** p. 21 figs.

Opilio zichyi **nom. n.** for *O. scabrum* (Kulc.) preocc. p. 775; *O. lettowi* **sp. n.** Tanganyika Terr. p. 780 fig. 955, ROEWER **175.**

Pantopsalis continentalis **sp. n.** Australia p. 866, ROEWER **175.**

Parasclerosoma lusitanicum **sp. n.** Portugal p. 706 fig. 878, ROEWER **175.**

Parodiellus **nom. n.** for *Opilio obliquus* C. L. Koch p. 723, ROEWER **175.**

Phalangium abnormal front right leg, SCHJELDERUP-EBBE **188.**

Prionostemma circulatum p. 123 fig. 1, *P. riveti* p. 124 fig. 2 Ecuador, ROEWER **176.**

Prodentobunus **gen. n.** for *Dentobunus unispinosus* p. 948, ROEWER **175.**

Rhampsinitus lettowi **sp. n.** Tanganyika Terr. p. 795 fig. 974, ROEWER **175.**

Zacheus cubanus Caucasus p. 826 fig. 1006, *Z. moesiacus* Serbia p. 828 fig. 1007, **spp. n.,** ROEWER **175.**

Zaleptus cinctus, Z. unicolor Malacca p. 1041, *Z. jacobsoni* Sumatra p. 1042, **spp. n.,** ROEWER **175.**

ANTHRACOMARTI.

†*Anthracosiro woodwardi* in Tyne coalfield figured p. 462, GILL **90.**

†*Eophrynus pococki* **sp. n.** Tyne Coal-measures, GILL Geol. Mag. **61** p. 459 fig. 2.

RICINULEI.

(Vacant.)

ACARI.

Remarks on the classification of Mites p. 112, THOR **219.**

Suggestions for the classification of the Mites and a review of the structure of the genera, JAKOB **116.**

On the morphology, homologies and signification of the "rostrum" in Acarina, ANDRÉ **3.**

Mites from amber in the collection of the University of Königsberg, SELLNICK **198.**

Acarina of the Volga district, THOR **218.**

The Bird-Acarids of the Norwegian Novaya Zemlya expedition, VITZTHUM **238.**

The Ticks of Nyasaland with descript. and figs., MEZA **141.**

Australian Ticks, FERGUSON **82.**

ORIBATIDAE.

Oribatid Mites from West Prussia, SELLNICK **197.**

Mites found in Rodent-burrows in Tunisia, ANDRÉ **4.**

Cepheus nivalis **sp. n.** Switzerland SCHWEIZER Verh. Natf. Ges., Basel **33** p. 61 fig. 27.

†*Cepheus tegeocraniformis* **sp. n.** Baltic amber, SELLNICK Schr. physik. Ges. Königsberg **59** p. 26 fig. 6.

†*Ceratoppia bipilis* fr. *fossilis* **fr. n.** p. 28, SELLNICK **198.**

Ceratozetes (*Allozetes* ?) *parvulus* **sp. n.** Germany, SELLNICK Schr. physik. Ges. Königsberg **63** p. 97 1 fig.

Cultrozetes **gen. n.** for *Zetes pilosus* C. L. Koch, SELLNICK Schr. physik. Ges. **63** p. 98.

Cymbaeremaeus (*Scapheremaeus*) *palustris* **sp. n.**, Esthonia SELLNICK in DAMPF SitzBer. Natf. Ges. Univ. Dorpat **31** p. 68 4 figs.

Damaeus femoratus p. 68 fig. 30, SCHWEIZER **195.**

Dameosoma fasciatum p. 69 fig. 31, SCHWEIZER **195.**

†*Embolocarus* **gen. n.** for *E. pergratus* **sp. n.** Baltic amber, SELLNICK Schr. physik. Ges. Königsberg **59** p. 39 figs. 20–21.

†*Eremaeus oblongus* fr. *fossilis* **fr. n.** p. 29, SELLNICK **198.**

Euphthiracarus depressculus **sp. n.** New York, *G. flavus* described, JACOT Trans. Amer. Micros. Soc. **43** p. 90 figs.

Galumna samoaensis **sp. n.** in moss Samoan Is., JACOT Trans. Amer. Micros. Soc. **43** p. 85 figs.—*G. egregia* p. 288 fig., *G. pusilla* p. 289 fig., *G. numerosa* p. 292 fig., **spp. n.**, Brazil and other species figured, SELLNICK Arch. Mus. Rio de J. **24**; *G. brasiliensis* p. 297, *G. unica* p. 298 id. tom. cit.

Galumnella secunda **sp. n.** Brazil, SELLNICK Arch. Mus. Rio de J. **24** p. 294 fig. 20.

†*Gradidorsum* **gen. n.** for *G. asper* **sp. n.** Baltic amber, SELLNICK Schr. physik. Ges. Königsberg **59** p. 35 figs. 15, 16.

†*Gymnodamaeus sepotisus* **sp. n.** Baltic amber, SELLNICK Schr. physik. Ges. Königsberg **59** p. 32 fig.

†*Hermanniella tuberculata* **sp. n.** Baltic amber, SELLNICK Schr. physik. Ges. Königsberg **59** p. 33 fig. 13.

†*Hoploderma multipunctatum* **sp. n.** Baltic amber, SELLNICK Schr. physik. Ges. Königsberg **59** p. 41 fig. 22.

Lepidoribates **gen. n.** p. 41 for *L. latirostris* **sp. n.** p. 42 Germany, SELLNICK Schr. physik. Ges. Königsberg **61–62.**

Melaconothrus novus **sp. n.** West Prussia, SELLNICK Schr. Natf. Ges. Danzig **15** p. 76 figs. 3, 4.

Neoliodes vermiculatus **sp. n.** nr. Peking and note on other species, JACOT J. N. China As. Soc. **55** p. 78 11 figs.

Neoribates foraminiferus **sp. n.** p. 295 fig. 21, *N. f. fulvus* **var. n.** p. 296 Brazil, SELLNICK Arch. Mus. Rio de J. **24.**

Notaspis exilis var. *maculata* **var. n.** Switzerland p. 64 fig. 28, *N. furcillata* p. 65 fig. 29, SCHWEIZER Verh. Natf. Ges. Basel **33.**

†*Nothrus illautus* **sp. n.** p. 38 fig. 18, *N. horridus* fr. *fossilis* **fr. n.** p. 39 fig. 19 Baltic amber, SELLNICK Schr. physik. Ges. Königsberg **59.**

Oribata gracilis var. *minor* **var. n.** fig. 21, *O. gracilis* fig. 20 p. 54, *O. tecta* var. *alpina* **var. n.** p. 57 fig. 23, *O. conjunctus* **sp. n.** p. 57 fig. 24, *O. pseudofusiger* **sp. n.** p. 59 fig. 25, *O. carli* **sp. n.** p. 59 fig. 26 all Switzerland, SCHWEIZER Verh. Natf. Ges. Basel **33.**—*O. spinosus*, *O.* (?) *minutissimus*, **spp. n.**, Germany SELLNICK Schr. physik. Ges. Königsberg **61–62** p. 40.

Oribatula lucida **sp. n.** West Prussia, SELLNICK Schr. Natf. Ges. Danzig **15** p. 74 fig.

†*Oribella* (?) *cervicornu* **sp. n.** Baltic amber, SELLNICK Schr. physik. Ges. Königsberg **59** p. 31 fig. 1.

Oribotritia **nom. n.** pro *Tritia* Berl. 1883 nec Risso 1826, JACOT J. N. China As. Soc. **55** p. 83.

Phthiracarus applicatus, p. 36, *P. spinosus*, *P. lutulentus* p. 37, **spp. n.** Germany and note on other species, SELLNICK Schr. physik. Ges. Königsberg **61–62** p. 37.—*P. applicatus* is **nom. n.** not **sp. n.** *P. lutulentus* = *P. clavigerus* Berl. p. 98, SELLNICK **200.**

†*Phthiracarus pyropus* **sp. n.** Baltic amber, SELLNICK Schr. physik. Ges. Königsberg **59** p. 41 fig. 23.

†*Plategeocranus* **gen. n.** for *P. sulcatus* (Karch), SELLNICK Schr. physik. Ges. Königsberg **59** p. 28 fig.

Punctoribates atomus taxonomic note p. 38, SELLNICK **200.**

†*Scutoribates* **gen. n.** for *S. perornatus* **sp. n.** Baltic amber, SELLNICK Schr. physik. Ges. Königsberg **59** p. 25 fig.

Sphaerozetes (*Trichoribates*) *numerosus*, SELLNICK in DAMPF SitzBer. Natf. Ges. Univ. Dorpat **31** 1924 p. 67 4 figs.—*S.* (?) *gratus* **sp. n.** West Prussia, SELLNICK Schr. Natf. Ges. Danzig **15** 1922 p. 72 fig. 1.

Stictozetes aequalis **sp. n.** Brazil, SELLNICK Arch. Mus. Rio de J. **24** p. 293 fig. 9.

†*Strieremaeus* **gen. n.** for type *S. illibatus* p. 29 figs 8, 9, *S. cordiformatus* p. 30 fig. 10, **spp. n.**, Baltic amber, SELLNICK Schr. physik. Ges. Königsberg **59.**

†*Tectocymba* **gen. n.** for *T. rara* **sp. n.** Baltic amber, SELLNICK Schr. physik. Ges. Königsberg **59** p. 34 2 figs.

†*Tegeocranus implicatus* **sp. n.** Baltic amber, SELLNICK Schr. physik. Ges. Königsberg **59** p. 27 fig. 7.

Tripochthonius trichosus **sp. n.** Switzerland, SCHWEIZER Verh. Natf. Ges. Basel **33** p. 75 fig. 32.

Tritia krakatauensis **sp. n.** Krakatau, also Java, SELLNICK Treubia **5** p. 372 figs.

GAMASIDAE.

Allodermanyssus **gen. n.** p. 8 for type *Dermanyssus sanguineus* Hirst, also rediagnosed p. 25 fig. EWING P. U. S. N. Mus. **62** art. 13.

Amblyseius obtusus var. *alpinus* **var. n.** Switzerland, SCHWEIZER Verh. Natf. Ges. Basel **33** p. 41 fig. 10.

Ameroseius pseudocometa **sp. n.** Switzerland, SCHWEIZER Verh. Natf. Ges. Basel **33** p. 42 fig. 11.

Ceratonyssus **gen. n.** for type *C. musculi* (C. L. Koch) p. 6 fig. 3, *C. ceratognathus* **sp. n.** S. Carolina from Bat p. 11 fig., EWING P. U. S. N. Mus. **62** art. 13.

Dermanyssus americanus **sp. n.** Brit. Columbia and other Amer. sp. diagnosed EWING P. U. S. N. Mus. **62** art. 13 p. 24 figs.

Dolaea perkinsi on Krakatau p. 366, VITZTHUM **239.**

Entonyssinae **subf. n.** p. 1 for *Entonyssus* **gen. n.** p. 5 fig. 1 for *E. halli* **sp. n.** in air sac of *Crotalus* in Texas, EWING P. U. S. N. Mus. **62** art. 13; also Proc. Ent. Soc. Washington **26** p. 179.

Epicrius menzeli **sp. n.** Switzerland p. 47 fig. 16, *E. geometricus* p. 46 fig. 15, SCHWEIZER Verh. Natf. Ges. Basel **33**

Fuscuropoda **subg. n.** for *Uropoda consanguinea* Berl. with addt. descript. and figs. p. 360, VITZTHUM **239.**

Gamasellus (*Protolaeleps*) *aster* p. 35 figs. 6, 7, SCHWEIZER **195.**

Gamasus (*Gamasus*) *handschini* p. 27 figs. 1–2; *G.* (*Eugamasus*) *zschokkei* p. 28 figs. 3 4, **spp. n.**, Switzerland, *G.* (*Pergamasus*) *probsti* p. 31 fig. 5, SCHWEIZER Verh. Natf. Ges. Basel **33.**

Inchoronyssus Kolenati, type designated, *I. scutatus* K. p. 7 fig. 4, *I. sternalis* Maryland p. 13 fig. 8 **sp. n.** and other N. Amer. spp. described, EWING P. U. S. N. Mus. **62** art. 13.

Ixodorynchinae (sic) **subf. n.** p. 1 for *Ixodorhynchus* (sic) **gen. n.** p. 5 fig. for *I. liponyssoides* **sp. n.** Iowa in Snakes, EWING P. U. S. N. Mus. **62** art. 13.

Laelaps hawaiiensis **sp. n.** on the Hawaiian Rat, EWING Bul. Bernice P. Bishop Mus. no. **14** p. 8 fig. 1.—*L.* (*Hypoaspis*) *myrmophilus* and *L.* (*Cosmolaeleps*) *cuneifer* myrmecophilous habits in Calabria, MENOZZI **139.**

Lasioseius (*Lasioseius*) *serratus* p. 43 fig. 12, *L.* (*L.*) *tenuipes* p. 43 fig. 13, SCHWEIZER **195.**—*L.* (*Episeius*) *major* p. 130 fig. 1, *L.* (?) *listrophorus* p. 131 fig. 2, SCHWEIZER **194.**

Leiognathus constrictus **sp. n.** New York State from Thrush and other N. Amer. spp. described, EWING P. U. S. N. Mus. **62** art. 13 p. 16 figs.

Liponyssus triangulus Maryland p. 18 fig., *L. pacificus* Oregon p. 19 figs., *L. occidentalis* Montana p. 20 figs., *L. montanus* Montana p. 21 fig., *L. tenuiscutatus* Cuba p. 22 fig. **spp. n.** and other American spp. diagnosed, EWING P. U. S. N. Mus. **62** art. 13.

Macrocheles (*Geholapsis*) *mandibularis* p. 37 fig. 9, SCHWEIZER **195.**—*M. submotus* **nom. n.** for *M. cognatus* preoc., FALCONER Naturalist **1924** p. 363.

Messoracarus mirandus myrmecophilous habits in Calabria, MENOZZI **139**.

Pachylaelaps laeuchli **sp. n.** Switzerland, SCHWEIZER Verh. Natf. Ges. Basel **33** p. 37 fig. 8.

Serpenticola **gen. n.** p. 6 for type *Liponyssus serpentium* (Hirst) addt. descript. from Snake from Georgia p. 12 fig., EWING P. U. S. N. Mus. **62** art. 13.

Tachyuropoda (*Dinychura*) *alpina* **sp. n.** Switzerland, SCHWEIZER Verh. Natf. Ges. Basel **33** p. 50 fig. 18.

Tetragonyssus **gen. n.** for type *Liponyssus gigas* Oud. p. 6; also including *T. spiniger* (Ewing & Storer) and *T. bermudaensis* (Ewing) p. 10 figs., EWING P.U.S.N. Mus. **62** art. 13.

Urodinychus subterranus **sp. n.** Switzerland, SCHWEIZER Verh. Natf. Ges. Basel **33** p. 51 fig. 19.

Uroseius hunzikeri **sp. n.** Switzerland, SCHWEIZER Verh. Natf. Ges. Basel **33** p. 48 fig. 17.

Zercon triangularis var. *echinatus* **var. n.** Switzerland, SCHWEIZER Verh. Natf. Ges. Basel **33** p. 45 fig. 14.

ARGASIDAE.

Ornithodorus moubata feeding experiments and its Spirochaete, HOOF **105**; not a carrier of the parasite of Relapsing Fever, INGRAM **108**; *O. crossi*, its relations to *Tryp. evansi*, YORKE & MACFIE **246**.—*O. normandi* **sp. n.** on Rodents in Tunisia, LARROUSE Ann. Parasitol. Paris 1 p. 170 figs.

IXODIDAE.

A review of the genera of the Ticks Ixodidae with account of anatomy, biology, distribution, and classification, JAKOB **111 112**.

General anatomy, morphology, embryology, life history and systematics of the Ixodidae, especially of the genus *Hyalomma*, CHODZIESNER **53**.

The seasonal appearance of Ixodidae in Algeria, SENEVET & ROSSI **203**.

The breathing apparatus of Ixodidae, STEKHOVEN **215**.

Amblyomma agamum life history and habits, BRUMPT **32**.—*A. williamsi* **sp. n.** on Lizards, S. Seymour, Galapagos, BANKS Zoologica **5** p. 94 fig. 16.

Boophilus decoloratus an abnormal example, fig., BEDFORD **12**.

Dermacentor venustus or *reticulatus* nomenclature discussed, COCKERELL **57**.

Haemaphysalis concinna in Brandenburg, SCHULZE **192**.

Hyalomma mauritanicum nymph described, SENEVET **202**.—*H. aegyptium* external morphology, bionomics, life history, SHARIF **204**.

Ixodes ricinus causing tick paralysis to sheep in Crete, BLANC & CAMINOPETROS **23**.—*I. apronophorus* **sp. n.** on *Arvicola* in Germany, SCHULZE Zool. Anz. Leipzig **59** p. 281 5 figs.—*I. holocyclus* redescription and life history in Australia, ROSS **182**.

TARSONEMIDAE.

Acarapis woodi and the Isle of Wight Bee disease, SAMMAN & GATENBY **185**.

Locustacarus **gen. n.** p. 67 for *L. trachealis* **sp. n.** p. 68 Kansas, EWING Proc. Ent. Soc. Washington **26** p. 68.

Tarsonemus phyllophorus **sp. n.** Florida, EWING Proc. Ent. Soc. Washington **26** p. 66.

Tetrapolius rhynchophori **sp. n.** Panama, EWING Proc. Ent. Soc. Washington **26** p. 69.

TROMBIDIDAE.

Belaustium sulcatum descript. p. 357 2 figs., VITZTHUM **239**.

Chyzeria novaezealandiae **sp. n.** New Zealand, HIRST P. Z. S. 1924 p. 1077 figs.

Diplothrombium longipes fig. 33, *D. walteri* fig. 34 p. 85, **spp. n.**, Switzerland, SCHWEIZER Verh. Natf. Ges. Basel **33**.

Erythraeus hercules var. *nivalis* **var. n.** Switzerland, SCHWEIZER Verh. Natf. Ges. Basel 33 p. 80.—*E. remotus* **sp. n.** Tower I. Galapagos, BANKS Zoologica **5** p. 93 2 figs.

Fessoniella **gen. n.** for *F. mitchelli* **sp. n.** Cape Town, HIRST P. Z. S. 1924 p. 1075 figs.

Microthrombidium berlesei **sp. n.** p. 90 fig. 40, *M. pusillum* var. *minor* **var. n.** p. 88 fig. 36, *M. simulans* var. *minor* **var. n.** p. 89 fig. 38, *M. simulans* var. *parvulus* **var. n.** p. 90 fig. 39, *M. ferociforme* p. 88 fig. 37 all Switzerland,

SCHWEIZER Verh. Natf. Ges. Basel **33**.—*M.* (*Enemotrombidium*) *berlesei* p. 274 figs., *M.* (*E.*) *echinotrichum* p. 276 figs., **spp. n.**, Tuninia, ANDRÉ Bul. Muséum **1924**.—*M.* (*Enemothrombium*) *frumentarium* **sp. n.** free-living Krakatau p. 256 fig. 2, *M.* (*E.*) *dentipile* also on Krakatau p. 354 fig. 1, VITZTHUM Treubia **5**.

Neoteneriffiola **gen. n.** for *N. luxoriensis* **sp. n.** Upper Egypt, HIRST P. Z. S. **1924** p. 1078 figs.

Paratetranychus iseilemae **sp. n.** S. India p. 524 figs., *P. pini* **nom. n.** England p. 524, *T. inunguis* in England p. 524 figs., HIRST Ann. Mag. N. H. (9) **14**.

Podothrombium blanci **sp. n.** Switzerland, SCHWEIZER Verh. Natf. Ges. Basel **33** p. 86.—*P. larroussei* **sp. n.** p. 273 figs., *T. macrocarpum numidica* **var. n.** p. 272 fig. Tunisia, ANDRÉ Bul. Muséum **1924**.

Raoiella **gen. n.** [nr. *Tenuipalpes*] for *R. indica* **sp. n.** S. India on coconut leaves, HIRST Ann. Mag. N. H. (9) **14** p. 522 figs.

Sericothrombium holosericeum var. *brevipapillosa* **var. n.** Mekong valley, ANDRÉ Bul. Muséum Paris **1924** p. 368.

Tetranychus telarius synonymy and distribution, HIRST **103**; poisonous effect of naphthaline vapour, SPEYER & OWEN **214**.—*T. fijiensis* Fiji Is. on coconuts p. 523, figs.; *T.* (*Schizotetranychus*) *hindustanicus* S. India p. 525 figs., **spp. n.**, HIRST Ann. Mag. N. H. (9) **14**.

Trombicula on East Indian species, their life history and their connection with Pseudotyphus p. 499, *T. keukenschrijveri* p. 523 3 figs., *T. rara* p. 527 4 figs., **spp. n.**, Sumatra, WALCH Geneeskundig Tidj. Ned.-Ind. **64**.

Trombidium megalochrium var. *ticini* **var. n.** Switzerland, SCHWEIZER Verh. Natf. Ges. Basel **33** p. 91.

HALICARIDAE.

Halacarus octoporus **sp. n.** Germany, VIETS Arch. Hydrob. Stüttgart **15** p. 118 3 figs.—*H.* (*Porohalacarus*) *alpinus duodecimpora* **var. n.** Volga district, THOR Arb. Biol. Wolga-Station **7** p. 48 2 figs.

Limnohalacarus wackeri descript., figs. *L. mauritzi* is a synonym p. 216, ROMIJN & VIETS **181**.

Walterella **gen. n.** for *W. weberi* **sp. n.** Hannover Prov., ROMIJN & VIETS Arch. Natg. **90** A Hft. 4 p. 217 figs. 3, 6.

HYDRACHNIDAE.

List of Hydracarinids from Swiss Alpine lakes with localities, remarks and many figures and a chapter on development and ecology, WALTER **244**.

South African Hydracnids, VIETS **232**.

Water mites from Alaska and N.W. Canada, MARSHALL **134**.

Egg-laying and spawning habits of Hydrachnids, SOLOKOW **210**.

Acercus pistillifer var. *stylatus* **var. n.** Sweden, LUNDBLAD Ent. Tidskr. **45** p. 70.

Arrhenurus (*Megaluracarus*) *finmarchichus* p. 106 3 figs., *A.* (*Truncaturus*) *primitivus* p. 18 1 fig. Norway, THOR Nyt Mag. Naturv. **61**.—*A. lapponicus* **sp. n.** Lapland, LUNDBLAD Ent. Tidskr. **45** p. 71 fig.—*A. fontinalis* **sp. n.** Holstein, VIETS Arch. Hydrobiol. Suppl. Bd. **3** p. 283 figs.—*A. sinearcus* **sp. n.** Holstein and other species figured, VIETS Arch. Hydrobiol. Suppl. Bd. **4** 1924 p. 81 figs. 17–19.—*A. larochei* **sp. n.** Kenya Colony, WALTER Bul. Soc. Sci. Maroc. **4** p. 68 3 figs.—*A.* ? *capensis* nr. Cape Town descr. and fig. p. 83, VIETS **232**.

A.-Thienemannia **gen. n.** for type *A.-T. schermeri* **sp. n.** Holstein, VIETS Arch. Hydrob. Suppl. Bd. **3** p. 274 figs.

Atractides stadleri **sp. n.** Bavaria, WALTER Zool. Anz. **59** p. 107 2 figs.—*A.* (*Rusetria*) *wolgaensis* **sp. n.** Volga distr. with note on nymph stage, THOR Arb. Biol. Wolga Station **7** p. 51 figs. 6, 7.

Aturus scaber and *A. s. rotunda* descript. figs. 7–10 p. 222, ROMIJN & VIETS **181**.

Azonopsis trituberculatus **sp. n.** Morocco, WALTER Bul. Soc. Sci. Maroc **4** p. 67 2 figs.

Barbaxona **gen. n.** for *B. barbata* **sp. n.** Cameroon, VIETS Zool. Anz. **58** p. 105.

Drammenia elongata bremensis **var. n.** nr. Bremen, VIETS Arch. Hydrob. Suppl. Bd. **3** p. 207 fig.

Duralimnesia **subg. n.** for *D. tenuipalpis* **sp. n.** Cameroon, VIETS Zool. Anz. **58** p. 103.

Eylais koenikei var. *discordiosa* **var. n.** Lapland, LUNDBLAD Ent. Tidskr. **45** p. 67.

Forelia ligulifera obtusata **var. n.** Sweden, LUNDBLAD Ent. Tidskr. Stockh. **45** p. 179 figs. 6–14.

Gnaphiscus occidentalis **sp. n.** Alaska, MARSHALL Trans. Amer. Micros. Soc. **43** p. 247 figs. 51–55.

Harpagopalpinae **subf. n.** *Harpagopalpus* **gen. n.** for *H. octoporus* et *H. tetraporus*, **spp. n.**, Cameroon, VIETS Zool. Anz. **58** p. 106.

Huitfeedtia rectipes p. 78 figs. 4–6, VIETS **236.**

Hydryphantes handschini **sp. n.** Morocco, WALTER Bul. Soc. Sci. Maroc **4** p. 64 4 figs.

Hygrobates walteri **sp. n.** Norway, THOR Nyt Mag. Naturv. **61** p. 103 1 fig.—*H. norwegicus* p. 257 figs. 65 69 75, VIETS **235.**—*H. amphilaminatus* **sp. n.** Sweden, LUNDBLAD Ent. Tidskr. Stockh. **45** p. 178 figs. 1–5.—*H. naicus imminutus* **var. n.** nr. Perm, Russia, SOKOLOW Bul. Inst. Tech. Biol. Perm **3** p. 115.—*H. extensus* **sp. n.** Cameroon, VIETS Zool. Anz. **58** p. 103.

Hygrobatopsis **subg. n.** for *H. levipalpis* **sp. n.** Cameroon, VIETS Zool. Anz. **58** p. 103.

Lamanipes simulans **sp. n.** Bt. Columbia, MARSHALL Trans. Amer. Micros. Soc. **43** p. 244 figs. 46, 47.

Lebertia complexa metamorphosis and larval stages, LUNDBLAD **131.**—*L.* (*Apolebertia*) *prolongata* p. 91 2 figs., *L.* (*A.*) *vietsi* p. 94 2 figs., *L.* (*Hexalebertia*) *expansa* p. 96 2 figs., all Norway, *L.* (*Pseudolebertia*) *subglacialis* p. 99 1 fig. Denmark, **spp. n.**, THOR Nyt Mag. Naturv. **61.**—*L.* (*Hexalebertia*) *holsatica* p. 208 figs. 31–37, *L.* (*H.*) *crenophila* p. 213 figs. 38–40 text-fig. 10, **spp. n.**; *L. crenophila lobata* p. 221 figs. 44, 47; *L.* (*Hexalebertia*) *complexa producta* p. 225 figs. 48–50 54 Holstein, *L.* (*H.*) *conjuncta* p. 232 fig. 51 Sweden, *L.* (*H.*) *angulata cornuta* p. 234 figs. 52 53 55 textf. 11 12 Sweden, *L.* (*Pseudolebertia*) *anellata tigillifera* p. 240 figs. 56 57 60 61 nr. Bremen; *L.* (*Neolebertia celtica procera* p. 247 figs. 58 62 nr. Bremen, all **subspp. n.**; *L.* (*Neolebertia*) *minutipalpis* **sp. n.** p. 251 figs. 59 63 64 66 nr. Bremen; *L.* (*Pilolebertia*) *circularis peregrina* p. 254 figs. 67 68 Holstein, VIETS Arch. Hydrobiol. Stüttgart Suppl. Bd. **3.**—*L.* (*Neo-L.*) *ambigua* **sp. n.** Bavaria, WALTER Zool. Anz. **59** p. 105 2 figs.—*L.* (*Philolebertia*) *behningi* **sp. n.** Volga distr., THOR Arb. Biol. Wolga-Station **7** p. 49 figs. 3–4.

Limnesia maculata form. *brevivalvata* **form. n.** Sweden, LUNDBLAD Ent. Tidskr. **45** p. 68.—*L. columbica* Bt. Columbia p. 239 figs. 9–12, *L. elliptica* Alaska p. 240 figs. 13 14, **spp. n.**, MARSHALL Trans. Amer. Micros. Soc. **43.**

Ljania bipapillata p. 265 text-figs. 14–16, VIETS **235.**

Lohmannella violacea note p. 121, VIETS **233.**

Megabates **gen. n.** for *M. rectipes* **sp. n.** Cameroon, VIETS Zool. Anz. **58** p. 104.

Megapus nodipalpis fonticola p. 260 figs., *M. n. pennata* p. 263 fig. 79, Holstein **subspp. n.**, VIETS Arch. Hydrob. Stüttgart Suppl. Bd. **3.**—*M. rossicus* **sp. n.** Volga distr., THOR Arb. Biol. Wolga Station **7** p. 54 fig. 14.

Neumania callosa p. 77 figs. 1–3, VIETS **236.**—*N. proxima* **sp. n.** nr. Cape Town, VIETS Deutsch. Südpolar Exped. **8** p. 81 fig. 1.—*N. kodiakica* **sp. n.** Kodiak I., Alaska, MARSHALL Trans. Amer. Micros. Soc. **43** p. 246 figs. 42–43.

Piona paucipora p. 78 figs. 7–9, VIETS **236.**—*P. bipora* **sp. n.** Norway, THOR Nyt Mag. Naturv. **61** p. 105 1 fig.—*P. gyrophora* p. 71 **sp. n.**, *P. stjordalensis* var. *gracilipalpis* p. 70 fig. **var. n.** Sweden, LUNDBLAD Ent. Tidskr. **45.**—*P. neocarnea* Alaska p. 241 figs. 15–17, *P. rubrapes* Kodiak I. p. 241 figs. 17–21, *P. latigenitalia* Bt. Columbia p. 242 figs. 22 27–29, *P. longiseta* Kodiak I. p. 243 figs. 23 26, *P. insularis* Yukon Terr. p. 243 figs. 24 30 31, **spp. n.**, MARSHALL Trans. Amer. Micros. Soc. **43.**

Pionacercus novus **sp. n.** Canada? MARSHALL Trans. Amer. Micros. Soc. **43** p. 244 figs. 35 41.

Pionopsis latilamellis **sp. n.** Alaska, MARSHALL Trans. Amer. Micros. Soc. **43** p. 244 fig. 32–34.

Pollicipalpus **gen. n.** for *P. scutatus* **sp. n.** Cameroon, VIETS Zool. Anz. **58** p. 104.

Porohalicarus **gen. n.** for *P. vietsi* **sp. n.** Germany, THOR Nyt Mag. Naturv. **61** p. 110 1 fig.

Protzia brevipes **sp. n.** Morocco, WALTER Bul. Soc. Sci. Maroc. **4** p. 63 2 figs.

Pseudohydryphantes latipalpus **sp. n.** Alaska, MARSHALL Trans. Amer. Micros. Soc. **43** p. 245 figs. 44–45.

Sperchon squamosus infracta **var. n.** Sweden, VIETS Arch. Hydrob. Suppl. Bd. **3** p. 379.—*S.* (*Squamosperchon*) *norvegicus* **sp. n.** Norway, THOR Nyt Mag. Naturv. **61** p. 101 1 fig.

Teutonia lunata **sp. n.** Alaska, MARSHALL Trans. Amer. Micros. Soc. **43** p. 245 figs. 48–50.

Thyas mandibularis **sp. n.** Sweden, LUNDBLAD Ent. Tidskr. **45** p. 68 fig.—*T. diversipora* **sp. n.** Rugen Germany p. 413 figs. 3–6, *T. scutata* noticed p. 411 fig. 1–2, VIETS Arch. Hydrobiol. **15.**

Unionicola crassipes var. *reducta* **var. n.** Sweden, LUNDBLAD Ent. Tidskr. **45** p. 70.

Xystonotus willmanni **sp. n.** nr. Bremen, VIETS Arch. Hydrob. Suppl. Bd. **3** p. 269 figs.

SARCOPTIDAE.

Berlesella alata description of this named but undescribed species of Trouessant Borneo p. 395 figs. 86–90, BONNET **25.**

Buchholzia trouessarti **sp. n.** on *Diomedea* Southern Seas and revision of the genus, BONNET Bul. Mus. Zool. Paris **49** p. 193 figs. 53–59.

Chorioptes texanus **sp. n.** Texas, HIRST Ann. Mag. N. H. (9) **13** p. 538.

Megninia revision of genus p. 150, *M. laciniosa* p. 152 figs. 3 4 Colombia, *M. angustella* p. 153 fig. 5 Malacca, *M. analgoides* p. 158 figs. 9–10 Australia, *M. bidentata* p. 162 figs. 16–17 N. Guinea, *M. strongylia* p. 163 fig. 18 N. Guinea, *M. longitarsa* p. 164 fig. 19 French Congo, *M. hamata* p. 167 figs. 22–24 Madagascar, *M. brevitarsa* p. 173 fig. 32 N. Guinea, *M. parallela* p. 178 fig. 37 N. America, *M. gracillima* p. 178 fig. 38 Madagascar etct., *M. filipes* p. 182 fig. 43 India, *M. leucacantha* p. 182 figs. 44 45 Madagascar, *M. perforata* p. 183 figs. 46 47 Madagascar, *M. acutipes* p. 185 figs. 48–49 Australia, **spp. n.**, chiefly parasites on birds, BONNET Bul. Soc. Zool. Paris **49.**

Mesalges revision p. 196, *M. similis* p. 199 fig. 59 Senegal etct., *M. diaphanoxus* p. 201 fig. 63 Trop. Africa etct., *M. ceratopus* p. 206 figs. 71–74 N. Guinea, *M. hepatifolia* p. 211 fig. 78 Borneo, **spp. n.**, chiefly on birds, BONNET Bul. Soc. Zool. Paris **49.**

Psoroptoïdes spinosus p. 397 figs. 91–92, *P. psoroptus* p. 398 figs. 93–94 descriptions completed, BONNET Bul. Soc. Zool. Paris **49.**

Sarcoptes bionomics and economics of the form causing mange to the Buffalo in India, TIMONEY **221.**—*S. scabiei* cause of Craw-Craw in Sierra Leone, BLACKLOCK **22.**—*S. scabiei* var. *hominis* in West Africa, JOYEUX **118.**—*S. scabiei* var. *bovis* figured and described, distinct from horse mange, CAMERON **35.**

ERIOPHYIDAE.

General account of the Leaf-mites, their systematics, life-history and methods of investigation, NALEPA **146.**

Plant galls of northern Wales, FALCONER **80.**

Influence of Eriophyid Mites on the sex of Willows and Poplars, HARRISON **97.**

Diptilomiopus **gen. n.** for *D. javanicus* **sp. n.** Java, NALEPA Verh. Zool. Bot. Ges. Wien **67** p. 228.

Eriophyes pyri economics etct. 10 figs., TUCKER **225.**—*E. arbosti* p. 74 figs., *E. cazioti* p. 93 figs., *E. caullery* p. 12 2 figs., *E. jourdani* p. 13 3 figs., *E. cailloti* p. 18 1 fig., **spp. n.**, S. France, COTTE Mem. Soc. Linn. Provence no. **3.**—*E. cryptomerus* **sp. n.** Java, NALEPA Verh. Zool. Bot. Ges. Wien **67** 1918 p. 227.—*E. eucalypti* **sp. n.** injuring Eucalyptus in N. S. Wales, GURNEY Proc. Linn. Soc. N. S. W. **49** p. 396 1 fig.

Phyllocoptes jahandiezi p. 20 3 figs., *P. reynieri* p. 21, **spp. n.**, S. France, COTTA Mem. Soc. Linn. Provence no. **3.**—*P. oleivorus* life-history and attacks of a fungus, SPEARE & YOTHERS **213.**

TYROGLYPHIDAE.

Key of the genera of the Diacrotricha including Tyroglyphidae, Rhizoglyphidae, Tyrophagidae **fam. n.**, Saproglyphidae **fam. n.** etct. p. 301, OUDEMANS **154**; also OUDEMANS **153.**

Acardina balaenarum critical note and affinities p. 273, OUDEMANS **154.**

Acarus spinitarsus = probably *Tyroglyphus vethi* pp. 257 323 fig. etct., OUDEMANS **154.**

Aphelenia Oudms. 1923 = *Suidasia* Oudms. 1905 p. 319, OUDEMANS **154.**

Caloglyphus brasiliensis **sp. n.** Brazil ? OUDEMANS Ent. Ber. **6** p. 318.

Chaetodactylus claviger **sp. n.** Italy, OUDEMANS Ent. Ber. **6** p. 328.

Eberhardia **gen. n.** for type *Rhizoglyphus agilis* Mich. p. 230, is a synonym of *Tyroglyphus* p. 266, OUDEMANS Ent. Ber. **6.**

Ebertia **gen. n.** for *Tyroglyphus australis* Oudms., OUDEMANS Ent. Ber. **6** pp. 307 327.

Forcellinia **gen. n.** for *Tyroglyphus wasmanni* Moniez, OUDEMANS Ent. Ber. **6** p. 231.

Froriepia vimariensis Vitz. = a nymph of *Tyroglyphus* sp. p. 321, OUDEMANS **154.**

Histiogaster corticalis nymph and female descript. p. 317, OUDEMANS **154.**

Hypopus Duges identification of this genus p. 256, OUDEMANS **154.**

Mealia note on the genus p. 334, OUDEMANS **154.**

Monieziella trifolium addt. information p. 255, OUDEMANS **154.**

Olafsenia **gen. n.** for *Tyroglyphus trifolium* Oudms., also nymph stages descript., OUDEMANS Ent. Ber. **6** p. 318.

Petzschia gibba **sp. n.** Java, OUDEMANS Ent. Ber. Helder **6** p. 259.

Povelsenia **gen. n.** for *Tyroglyphus neotropicus* Oud., OUDEMANS Ent. Ber. **6** pp. 307 327.

Rhizoglyphus solani Holland *R. callae* Java, **spp. n.**, OUDEMANS Ent. Ber. Helder **6** p. 258.—*R. columbianus* **sp. n.** ? Colombia, OUDEMANS Ent. Ber. **6** p. 322.

Saproglyphus australis, *S. neotropicus* addt. information p. 259, OUDEMANS **154.**

Schwiebea italica **sp. n.** Java, OUDEMANS Ent. Ber. **6** p. 271.—*S. scalops* **sp. n.** ? Colombia, OUDEMANS Ent. Ber. **6** p. 322.

Sennertia sumatrensis p. 329 Sumatra, *S. roepkei* Java p. 330, *S. flabellifera* Java p. 331, **spp. n.**, OUDEMANS Ent. Ber. **6.**

Suidasia medanensis **sp. n.** Sumatra, OUDEMANS Ent. Ber. **6** p. 320.

Tyroborus **gen. n.** for *T. lini* **sp. n.**, OUDEMANS Ent. Ber. **6** p. 307.

Tyroglyphus anatomical details and review of subgenera p. 249, OUDEMANS **154.**—*T.* systematic and taxonomic notes p. xxii, *T.* (*T.*) *palmarum* **sp. n.** p. xxvi, N. Africa ? OUDEMANS Tidschr. Ent. **67.**—*T. michaeli* **nom. n.** for *T. agilis* Mich. p. 267, *T. dimidiatus* addt. information p. 269, OUDEMANS Ent. Ber. **6.**—*T. farinae* on the hypopus, SCHULZE **190.** — *T. mycophagus* life-history and larval development with special account of hypopus stage, SCHULZE **191.**

Tyrolichus for type *Tyroglyphus caseis*, **subgen. n.**, OUDEMANS Ent. Ber. **6** p. 250.

Tyrophagus **subg. n.** for *Acarus putrescentiae* Schrk, OUDEMANS Ent. Ber. **6** p. 250.—*T. vanheurni* **sp. n.** Java ? OUDEMANS Ent. Ber. **6** p. 326.—*T. lini* **sp. n.** loc. ? OUDEMANS Ent. Ber. **6** p. 325.

Valmontia mira **sp. n.** Java, OUDEMANS Ent. Ber. **6** p. 272.

Zwickia **gen. n.** for *Anoetus guentheri* Oudms., OUDEMANS Ent. Ber. **6** pp. 310 334.

TARDIGRADA.

Tardigrada of Finland, NEDERSTRÖM **151.**

Milnesium quadrifidum **sp. n.** Finland NEDERSTRÖM Acta Soc. Fenn. **46** p. 9.

PENTASTOMIDA.

The affinities and classification of Linguatulids, HAFFNER **96.**

Review of the family including historical notes, anatomy, life-history systematics and bibliography, HETT **99.**

The collection of Linguatulids in the Liverpool school of Tropical Medicine with keys and lists of species, SOUTHWELL **212.**

Alofia indica addt. description and fig. p. 140, HETT **99**.

Armillifer moniliformis var. *heymonsi* obtained from a Palm Civet in the Philippine Is. described and figured, TUBANGUI **224**.

? *Leiperia cincinnalis* larval forms from fishes in Lake Tanganyika described and figured, HETT **100**.

Pentastoma denticulatum found in human lung, SAGREDO **184**.

Porocephalus moniliformis male genital organs; body muscles; *P. armillatus* glands, nervous system, HAFFNER **96**.—*P. crotali* taxonomy description fig p. 141, HETT **99**.

Raillietiella spiralis **sp. n.** Palestine from *Coelopeltis*, HETT P. Z. S. **1924** p. 139 figs.

Subtriquetra shipleyi **sp. n.** India in Crocodile, HETT P. Z. S. **1924** p. 153.

MYRIOPODA.

CHILOPODA.

Centipede venom and its effects, BAERG **8**.

General account of the Biology, Morphology and Phylogeny of the Chilopoda (Bronn's Tier-Reichs), VERHOEFF **229**.

Cryptops review of the species with key and notes on variable characters and 4 pls., ARCHEY **7**.—*C. kempi* **sp. n.** Siju cave Assam, SILVESTRI Rec. Ind. Mus. **26** p. 73 figs.—*C. beebei* **sp. n.** Tower I. Galapagos, R. V. CHAMBERLIN Zoologica **5** p. 137.

Nannopodellus **gen. n.** for type *N. purpurascens* **sp. n.** S. Seymour I. Galapagos, R. V. CHAMBERLIN Zoologica **5** p. 140 4 figs.

Lithobius forficatus oogenesis, KING **121 122**; NATH **149**; cytology of early stages in the egg-development, GAJEWSKA **84**.—*L. alluaudi* **sp. n.** p. 189 4 figs., *L. melanops protectus* **var. n.** p. 190 1 fig. Morocco, BROLEMANN Bul. Soc. Sci. Maroc **4**.

Nesoporogaster **gen. n.** p. 99 for *N. excavatum* p. 100 figs. 1–9, **spp. n.**, Balearic Is., VERHOEFF Ent. Tidsk. **45**.

Paracryptops indicus **sp. n.** Siju cave, Assam, SILVESTRI Rec. Ind. Mus. **26** p. 74 figs.

Scolopendra morsitans nervous system BHATIA **16**; migrations in New Mexico, THURINGER **220**.

Thereuonema reconditum **sp. n.** Siju cave, Assam p. 75 figs., *T. nobile dolichopoda* **subsp. n.** Batu cave, Malay Pen. p. 77 figs., SILVESTRI Rec. Ind. Mus. **26**.

DIPLOPODA.

The Diplopods of Australia collected by Dr. Mjöberg, with revisions of classification and genera and many new species, VERHOEFF **230**.

Diplopods of New Caledonia, general considerations and conclusions, CARL **40**.

Anatomy and physiology of the alimentary canal of the Julidae, RANDOW **165**.

Reactions to light of the Diplopods, especially *Iulus* and *Polydesmus*, MÜLLER **145**.

Adelobolus **gen. n.** (Spiroboloidea) p. 109 for *A. simplex* p. 110, *A. transversesulcatus* p. 111, **spp. n.**, Queensl., VERHOEFF Ark. Zool. **16** no. 5.

Antichiropus (*Solänodolichopus*) *teres* p. 21, *A.* (*S.*) *vittatus* p. 22 fig. 5–10, **spp. n.**, Queensland, VERHOEFF Ark. Zool. **16** no. 5.

Attemsobolus **gen. n.** (Spiroboloidea) p. 100 for *A. bivittatus* **sp. n.** p. 101 Queensl., VERHOEFF Ark. Zool. **16** no. 5 figs. 67–70.

Aulacoporus **gen. n.** (Strongylosomidae) p. 17 for *A. castaneus* p. 18, *A. affinis*, *A. yarrabahnus* p. 19 fig. 2–4 **spp. n.**, Queensland, VERHOEFF Ark. Zool. **16** no. 5.

Australiosoma (*Paraustraliosoma* **subgen. n.**) for *P. malandensis* p. 25; *A.* (*Australiosoma*) *hamuligerum* p. 26, *A.* (*Dicladosomus* **subg. n.**) for *D. annulatipes* p. 27 all **spp. n.** Queensland, VERHOEFF Ark. Zool. **16** no. 5 figs. 13–16.

Borneopoeus **gen. n.** (Sphaerotheriidae) p. 57 for *B. costatus* **sp. n.** p. 60 Borneo, VERHOEFF Ark. Zool. **16** no. 5.

Bothrobelum **gen. n.** (Sphaerotheriidae) p. 58 for *B. rugosum* **sp. n.** Borneo, VERHOEFF Ark. Zool. **16** no. 5 fig. 32.

Brachydesmus on the construction of the nest, DUBOST **70**.

Brochopeltis **gen. n.** (Strongylosomidae) p. 32 for *B. mjöbergii* **sp. n.** p. 33, *B. m. queenslandica* **subsp. n.** p. 35 Queensland, VERHOEFF Ark. Zool. **16** no. 5 fig. 20.

Chondrodesmus nicaraguae **sp. n.** Nicaragua, R. V. CHAMBERLIN Ent. News **35** p. 174.

Cyliosoma denticulatum **sp. n.** *C. queenslandicum mjöbergi* **subsp. n.** Queensl., VERHOEFF Ark. Zool. **16** no. 5 figs.

Cyliosomella **gen. n.** (*Opisthandria*) p. 43 for *C. castaneum* **sp. n.** p. 48 Queensl., VERHOEFF Ark. Zool. **16** no. 5 figs.

Dicladosomus **subg. n.** see *Australiosoma.*

Dimematocricus glabratus p. 106, *D. rotundatus* p. 108, **spp. n.**, Queensland, VERHOEFF Ark. Zool. **16** no. 5 figs. 80–81.

†*Euphoberia ferox* in the Coal-measures described and figured p. 457, GILL **90.**

Gasatomus **gen. n.** p. 417 for type *G. emersoni* **sp. n.** p. 419 figs. termitophilous Bt. Guiana, R. V. CHAMBERLIN Zoologica **3.**

Glomeris (*Stenopleuromeris*) *ibizana* **sp. n.** Balearic Is. p. 105 fig. 11, *G. pulchra bukkariensis* **subsp. n.** nr. Fiume p. 106, VERHOEFF Ent. Tidsk. **45.**

Helicopodosoma **gen. n.** (Strongylosomidae) for *H. vittigerum* **sp. n.** Queensland, VERHOEFF Ark. Zool. **16** no. 5 fig. 17.

Helicopodosomella **gen. n.** (Strongylosomidae) for *H. melas* **sp. n.** N.W. Australia, VERHOEFF Ark. Zool. **16** no. 5 p. 30 fig. 18.

Hylomidae **fam. n.** p. 104 for *Hylomus* **gen. n.** p. 105 for *H. draco* **sp. n.** C. China p. 106 2 figs., COOK & LOOMIS J. Wash. Acad. Sci. **14**; extraordinary characters and evolution, COOK & LOOMIS **58.**

Julus increase of temperature and locomotion, CROZIER **63.**

Leuritus **gen. n.** p. 411 for type *L. termitophilus* **sp. n.** p. 413 figs. termite nest Bt. Guiana, R. V. CHAMBERLIN Zoologica **3.**

Lophoproctus queenslandicus **sp. n.** Queensland, VERHOEFF Ark. Zool. **16** no. 5 p. 39.

Merioproscelum **gen. n.** (Iulomorphidae) p. 83 for *M. penicilligerum* **sp. n.** Queensland, VERHOEFF Ark. Zool. **16** no. 5 fig. 41 44–49.

Mjöbergodesmus **gen. n.** (*Strongylosomidae*) for *M. annulatus* **sp. n.** Queensland, VERHOEFF Ark. Zool. **16** no. 5 p. 15 fig. 1.

Monographis mjöbergi **sp. n.** W. Australia, VERHOEFF Ark. Zool. **16** no. 5 p. 38.

Orthomorpha viatoria **sp. n.** Philippine Is., R. V. CHAMBERLIN Ent. News **35** p. 173 fig.

Otoplacosoma **gen. n.** (Strongylosomidae) for *O. bivittatum* **sp. n.** N.W. Australia, VERHOEFF Ark. Zool. **16** no. 5 p. 31 fig. 19.

Paraustraliosoma **subg. n.** see *Australiosoma.*

Peridontopyge spinosissima in French Sudan descript. larva and figs., BROLEMANN **31.**

Podykipus affinis **sp. n.** W. Australia, VERHOEFF Ark. Zool. **16** no. 5 p. 91 fig. 43 60–62.

Polydesmus on the nest, DUBOST **70.**

Poratobolus **gen. n.** (Spiroboloidea) p. 100 for *P. mjöbergi* **sp. n.** p. 104 Queensl., VERHOEFF Ark. Zool. **16** no. 5 figs. 63–65.

Prionobelum **gen. n.** (Sphaerotheriidae) p. 58 for *P. durum* **sp. n.** Tonkin p. 64, VERHOEFF Ark. Zool. **16** no. 5.

Proscelomerion **gen. n.** (Julomorphidae) p. 82 for *P. serratum* **sp. n.** p. 90 Queensl., VERHOEFF Ark. Zool. **16** no. 5 figs. 42 50–54.

Pseudostrongylosoma **gen. n.** p. 22 (Strongylosomidae) for *P. sjöstedti* **sp. n.** p. 23 Queensland, VERHOEFF Ark. Zool. **16** no. 5 figs. 11–12.

Queenslandesmus **gen. n.** (Sphaerotrichopidae) for *Q. sjöstedti* **sp. n.** Queensland, VERHOEFF Ark. Zool. **16** no. 5 p. 36 fig. 21.

Queenslandobolus **gen. n.** (Spiroboloidea) p. 100 for *Q. sjöstedti* **sp. n.** p. 102 Queensland, VERHOEFF Ark. Zool. **16** no. 5 figs. 71–75.

Rhinotus mjöbergi **sp. n.** Queensl., VERHOEFF Ark. Zool. **16** no. 5 p. 128 figs. 92–96.

Schizophyllum gravieri **sp. n.** Morocco, BROLEMANN Bul. Soc. Sci. Maroc **4** p. 184 2 figs.

Schizophyllum (*Bothroiulus*) *ibizanum* **sp. n.** Balearic Is., VERHOEFF Ent. Tidsk. **45** p. 107 figs. 12–15.

Siphonophora mjöbergi p. 123, *S. nodulosa* p. 126, *S. nasuta* p. 127, **spp. n.**, Queensl., VERHOEFF Ark. Zool. **16** no. 5 figs. 82–91.

Siphonotus latus **sp. n.** Queensland, VERHOEFF Ark. Zool. **16** no. 5 p. 131 figs. 97–100.

Sphaerobelum **gen. n.** (Sphaerotheriidae) p. 59 for *S. clavigerum* p. 65, *S. hirsutum* p. 66 Tonkin, VERHOEFF Ark. Zool. **16** no. 5.

Sphaeropoeus malaccanus described and figured p. 68, VERHOEFF **230.**

Stenitus **gen. n.** p. 414 for type *S. guiananus* **sp. n.** p. 415 figs. termitophilous Bt. Guiana, R. V. CHAMBERLIN Zoologica **3.**

Strongylosoma (*Entothalassinum*) *söderlundi* **sp. n.** Balearic Is., VERHOEFF Ent. Tidsk. **45** p. 106.

Syndesmogenus mimeuri **sp. n.** French Sudan, BROLEMANN Bul. Soc. Zool. Paris **49** p. 316 3 figs.

Thaumaceratopus **gen. n.** (Iulomorphidae) p. 83 for *T. cervinus* p. 86, *T. elongatus* p. 87, **spp. n.**, Queensland, VERHOEFF Ark. Zool. **16** no. 5 figs. 40 55–59.

Tidopterus **gen. n.** for type *T. sequens* **sp. n.** Bt. Guiana, R .V. CHAMBERLIN Zoologica **3** p. 420 figs.

Tonkinobelum **gen. n.** (Sphaerotheriidae) p. 58 for *T. maculatum* **sp. n.** Tonkin p. 62, VERHOEFF Ark. Zool. **16** no. 5 fig. 31.

Trachyiulus mimus **sp. n.** Siju cave, Assam, SILVESTRI Rec. Ind. Mus. **26** p. 71 figs.

Trigoniulus hemityphlus p. 112 S. Australia, *T. insculptus* p. 115, **spp. n.**, *T. i. blackalensis* p. 117 **subsp. n.**, all Queensl. and other species rediagnosed, VERHOEFF Ark. Zool. **16** no. 5 figs. 76 79.

SYMPHILA.

The Symphila (Scolopendrellidae) of Northumberland and Durham, with keys and a list of species, BAGNALL **9.**

PROTOTRACHEATA.

Paraperipatus keiensis **sp. n.** Kei Is Austro-Malayan region, HORST Videns. Medd. nat. For. **76** p. 119 3 figs.

XI. INSECTA

BY

THE IMPERIAL BUREAU OF ENTOMOLOGY

(Assisted by N. D. Riley and W. H. T. Tams).

CONTENTS

PAGE

I. Titles 6

II. Subject Index :—

General 107
Morphology 107
Physiology 110
Development 110
Ethology 111
Aetiology 113
Fossil Insects 114
Geography or Faunistic 114

III. Systematic :—[Orders and families in alphabetical order.]

General 119
Anoplura 300
Coleoptera :— 119–178

Alleculidae	154	Cassididae	178
Anobiidae	138	Cerambycidae	167
Anthicidae	155	Cetoniidae	151
Anthribidae	165	Chrysomelidae	173
Aphodiidae	147	Cicindelidae	120
Bostrychidae	138	Cistelidae	154
Brenthidae	165	Cleridae	138
Bruchidae	172	Clytridae	172
Buprestidae	141	Coccinellidae	135
Byrrhidae	137	Colydiidae	134
Byturidae	135	Copridae	147
Carabidae	121	Crioceridae	172

Coleoptera (*contd.*):— PAGE

Cryptocephalidae ... 172
Cryptophagidae ... 134
Cucujidae ... 134
Curculionidae ... 157
Cyphonidae ... 133
Dascillidae ... 141
Dermestidae ... 137
Donaciidae ... 172
Drilidae ... 140
Dryopidae ... 137
Dynastidae ... 151
Dytiscidae ... 127
Elateridae ... 141
Endomychidae ... 135
Erotylidae ... 135
Eucmenidae ... 141
Eumolpidae ... 173
Galerucidae ... 176
Geotrupidae ... 147
Glaphyridae ... 148
Gyrinidae ... 127
Haliplidae ... 126
Halticidae ... 175
Helodidae ... 133
Heteroceridae ... 137
Hispidae ... 177
Histeridae ... 132
Hydrophilidae ... 127
Hylophiliidae ... 155
Lagriidae ... 155
Lamiidae ... 169
Lampyridae ... 140
Languriidae ... 135
Leptinidae ... 131
Liodidae ... 131
Lucanidae ... 146
Lycidae ... 141
Lyctidae ... 138

PAGE

Melandryidae ... 157
Melasidae ... 141
Melolonthidae ... 148
Meloidae ... 156
Melyridae ... 139
Monommidae ... 157
Mordellidae ... 155
Mycetophagidae ... 137
Nitidulidae ... 134
Oedemeridae ... 157
Ostomidae ... 134
Parnidae ... 137
Paussidae ... 126
Phalacridae ... 137
Platypodidae ... 165
Platypsyllidae ... 131
Prionidae ... 166
Pselaphidae ... 132
Ptinidae ... 138
Pyrochroidae ... 155
Pythidae ... 157
Rhipiceridae ... 141
Rhipiphoridae ... 155
Rutelidae ... 150
Scaphididae ... 131
Scolytidae ... 164
Scraptiidae ... 155
Scydmaenidae ... 134
Silphidae ... 130
Sphindidae ... 138
Staphylinidae ... 128
Stylopidae ... 178
Telephoridae ... 140
Tenebrionidae ... 152
Thorictidae ... 137
Trichopterygidae ... 131
Trogositidae ... 134
Xylophilidae ... 155

Collembola ... 316

Diptera:— ... 237–278

Agromyzidae ... 277
Anisopodidae ... 247
Anthomyiidae ... 267
Asilidae ... 256
Asteiidae ... 277
Bibionidae ... 239
Blepharoceridae ... 240
Bombyliidae ... 257

Borboridae ... 268
Cecidomyiidae ... 238
Chironomidae ... 240
Chloropidae ... 274
Conopidae ... 263
Cordyluridae ... 268
Culicidae ... 244
Cyrtidae ... 255

Diptera (*contd.*):— PAGE

Deuterophlebiidae ... 240
Diopsidae 274
Dixidae 247
Dolochopodidae 259
Drosophilidae 275
Empidae 259
Ephydridae 275
Geomyzidae 277
Helomyzidae 269
Heteroneuridae 268
Hippoboscidae 277
Lauxaniidae 269
Leptidae 255
Limnobiidae 247
Lonchaeidae 269
Micropezidae 274
Milichiidae 274
Muscidae 267
Muscidae Acalyptratae ... 268
Muscidae Calyptratae ... 264
Mycetophilidae 238
Mydaidae 256
Nemestrinidae 255
Nycteribiidae 278
Oestridae 264
Omphralidae 255
Ortalidae 269
Phoridae 260
Phytomyzidae 277
Pipunculidae 261
Psychodidae 247
Ptychopteridae 247
Rhagionidae 255
Rhyphidae 247
Sapromyzidae 269
Scatomyzidae 268
Scatophagidae 268
Scenopidae 255
Sciomyzidae 269
Sepsidae 273
Simuliidae 239
Stratiomyiidae 252
Streblidae 278
Syrphidae 262
Tabanidae 254
Tachinidae 264
Tanyderidae 247
Thaumaleidae 247
Therevidae 255
Tipulidae 247
Trichoceridae 247
Trypetidae 271

Embioptera 303

Ephemeroptera 304

Hemiptera :— 283–297

Acanaloniidae 291
Acanthiidae 287
Achilidae 290
Achilixiidae 289
Aleurodidae 296
Aphidae 295
Aradidae 284
Belostomidae 288
Berytidae 285
Capsidae 287
Cercopidae 291
Cicadellidae 292
Cicadidae 288
Cimicidae 286
Cixiidae 289
Coccidae 296
Coreidae 284
Corixidae 288
Cydnidae 283
Delphacidae 289
Derbidae 290
Dictyopharidae 289
Dysodiidae 284
Enicocephalidae 286
Eurybrachyidae 290
Flatidae 291
Fulgoridae 289
Gerridae 287
Isometopidae 287
Issidae 290
Jassidae 292
Lygaeidae 285
Membracidae 291
Mesoveliidae 286
Microphysidae 286
Miridae 287

Hemiptera (*contd.*):— PAGE

Nabidae	286	Reduviidae	286
Naucoridae	288	Ricaniidae	291
Nepidae	288	Saldidae	287
Notonectidae	288	Termitaphidae	285
Peloridiidae	288	Termitocoridae	285
Pentatomidae	283	Tettigometridae... ...	290
Piesmidae	286	Tingidae	285
Psyllidae	294	Tropiduchidae	290
Pyrrhocoridae	285	Veliidae	287

Hymenoptera :— 219–237

Agaonidae	229	Formicidae	225
Apidae (s.l.)	219	Ichneumonidae	232
Belytidae	229	Mutillidae	224
Bethylidae	224	Mymaridae	232
Braconidae	235	Perilampidae	229
Callimomidae	229	Philanthidae	224
Chalcididae	229	Platygastridae	228
Chrysididae	225	Pompilidae	225
Cleonymidae	231	Proctotrupidae	229
Cynipidae	232	Psammocharidae ...	225
Diapriidae	229	Pteromalidae	231
Dryinidae	224	Scelionidae	229
Encyrtidae	230	Scoliidae	224
Eucharidae	230	Serphidae	229
Eulophidae	231	Sphegidae	224
Eumenidae	225	Tenthredinidae	237
Eupelmidae	230	Thynnidae	224
Eurytomidae	229	Trichogrammatidae ...	232
Evaniidae	236	Vespidae	225

Isoptera 301

Lepidoptera :— 179–218

Aegeriidae	211	Hesperiidae	188
Agaristidae	192	Hypsidae	203
Anthelidae	203	Lasiocampidae	206
Arctiidae	190	Lemoniidae	204
Bombycidae	205	Libytheidae	186
Brahmaeidae	205	Limacodidae	206
Callidulidae	207	Liparidae	203
Cercophanidae	204	Lycaenidae	186
Charideidae	206	Lymantriidae	203
Cossidae	205	Megalopygidae	206
Danaidae	182	Noctuidae	192
Drepanidae	207	Notodontidae	200
Erycinidae	186	Nymphalidae	183
Eupterotidae	199	Oxytenidae	204
Geometridae	200	Papilionidae	180
Hepialidae	218	Pieridae	181

Lepidoptera (*contd.*) :—	PAGE		PAGE
Pterophoridae ...	... 209	Syntomidae ...	... 189
Pterothysanidae...	... 203	Thyatiridae ...	... 199
Psychidae ...	... 205	Thyrididae ...	... 207
Pyralidae ...	... 207	Tineidae (s.l.) ...	... 211
Riodinidae ...	... 186	Tortricidae ...	... 209
Saturniidae ...	... 203	Uraniidae ...	... 205
Satyridae ...	... 184	Zygaenidae ...	... 206
Sphingidae ...	... 199		

Mallophaga 300

Mecoptera 283

Neuroptera 281

Odonata 306

Orthoptera :— 308–315

Acrididae ...	... 313	Grylloblattidae ...	... 308
Blattidae ...	... 308	Mantidae ...	... 310
Forficulidae ...	... 308	Phasmidae ...	... 310
Gryllidae ...	... 310	Tettigoniidae ...	... 311

Palaeodictyoptera 305

Paraneuroptera 306

Plecoptera 303

Protohymenoptera 237

Protura 317

Psocoptera 301

Siphonaptera 278

Thysanoptera 297

Thysanura 316

Trichoptera 279

Zeugloptera 218

I—TITLES.

1.—Abafi-Aigner, L., **Pável,** J., **Uhryk,** F. Fauna Regni Hungariae: Lepidoptera. Budapest 1918 pp. 5–82.

2.—Achard, J. Fragments entomologiques Prague 1922 pp. 1–48, 1923 pp. 49–126. [Col.]

3.—Achard, J. Les *Phytodecta* et leurs variations. Espèces et variétés nouvelles. Rectifications synonymiques. Casopis Prague **21** 1924 pp. 31–34. [Col.]

4.—Achard, J. Rectifications synonymiques. Casopis Prague **21** 1924 p. 37. [Col.]

5.—Achard, J. Descriptions de *Centroscelis* (Col. Chrysomelidae). Casopis Prague **21** 1924 p. 38.

6.—Achard, J. Nouveaux Chrysomelini d'Amérique. Bull. Soc. ent. France Paris **1924** pp. 133–136. [Col.]

7.—Achard, J. Nouvelles espèces de *Scaphidiolum* de la faune indomalaise (Col. Scaphidiidae). Bull. Soc. ent. France Paris **1924** pp. 150–153.

8.—Achard, J. Essai d'une subdivision nouvelle de la famille des Scaphidiidae. Ann. Soc. ent. Belg. Brussels **64** 1924 pp. 25–31. [Col.]

9.—Achard, J. Catalogue des Scaphidiidae de la faune paléarctique. Bull. Soc. ent. Belg. Brussels **6** 1924 pp. 143–155. [Col.]

10.—Ackermann, D. Über die Extraktstoffe von *Melolontha vulgaris.* III. Mitteilung. Zs. Biol. München **75** 1922 pp. 325–326. [Col.]

11.—Acqua. C. Studi di genetica nel *Bombyx mori.* Boll. R. Staz. sperim. Gelsicoltura e Bachicoltura Ascoli Piceno **3** 1924 pp. 185–193. [Lep.]

12.—Adair, E. W. The study of insects. Cairo J. Sci. **11** 1923 pp. 133–146 1 fig.

13.—Adair, E. W. Mantidae nouvelles pour l'Egypte (Orth.). Bull. Soc. R. ent. Egypte Cairo **1923** 1924 pp. 40–44.

14.—Adjaroff, M. Contribution à l'étude de la faune des papillons dans la région de la ville de Philipopoli. Trav. Soc. bulgar. Sci. nat. Sofia **11** 1924 pp. 122–130. [In Bulgarian.] [Lep.]

15.—Adkin, R. *Diacrisia lubricipeda* and *D. lutea*: their history and their varieties. Proc. S. London Ent. & N. H. Soc. **1923-24** 1924 pp. 55–62. [Lep.]

16.—Adolph, E. Zur Morphologie der Ephemeridenflügel. Fortsetzung nnd Schluss der Abhandlung über *Epeorus assimilis* Eaton. Nova Acta Leop. Halle **106** 1920 pp. 1–74 15 pls. 2 textfigs. [Ephem.]

17.—Ahlberg, O. Några hittils obeaktade, ekonomiskt viktiga Tripsar. Medd. Centralanst. Försöks. Jordbruk. Linkoping no. 263 1924 23 pp. 18 figs. 1 col. pl. [Thysanopt.]

18.—Ahlberg, O. Ueber die Biologie und Entwicklung des *Euchaetothrips ingens* Priesner. Ent. Tidsk. Stockholm **45** 1924 pp. 1–5 5 figs. [Thysanopt.]

19.—Aichele, F. Doppelte Copula von *Endromis versicolora.* Soc. ent. Stuttgart **39** 1924 pp. 2–3. [Lep.]

20.—Aichele, F. Neuere Beiträge zur Lepidopterenfauna Württembergs. Soc. ent. Stuttgart **39** 1924 p. 37.

21.—Aichele, F. Entwicklungsgeschichtliches zur Zeichnung der Parnassier. Soc. ent. Stuttgart **39** 1924 pp. 47–48. [Lep.]

22.—Ainslie, C. N. Note on the nesting habits of *Chlorion elegans.* Canad. Ent. Orillia **56** 1924 pp. 269–270. [Hym.]

23.—Alberti, B. Zwitterbildung bei *Erebia aethiops* Esp. (Lep. Satyr.). Zs. wiss. Insektenbiol. Berlin **19** 1924 p. 194.

24.—Aldrich, J. M. Notes on North American Tachinidae. Insec. Inscit. Menstr. Washington **12** 1924 pp. 145–149. [Dipt.]

25.—Aldrich, J. M. Notes on some types of American Muscoid Diptera in the collection of the Vienna Natural History Museum. Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 209–218.

26.—Aldrich, J. M. The Muscoid genus *Genea* in North America (Dipt.). Ent. News Philadelphia **35** 1924 pp. 210–214.

27.—Aldrich, J. M. A new genus and species of two-winged flies of the family Chloropidae injuring manihot in Brazil. Proc. U. S. Nat. Mus. Washington **65** 1924 art. 21 no. 2534 pp. 1–2. [Dipt.]

28.—Aldrich, J. M. & Webber, R. T. The North American species of parasitic two-winged Flies belonging to the genus *Phorocera* and other allied genera. Proc. U. S. Nat. Mus. Washington **63** 1924 art. 17 no. 2486 pp. 1–90. [Dipt.]

29.—Aldrich, J. M. & Webber, R. T. Change of preoccupied names. Proc. Ent. Soc. Washington **26** 1924 p. 195. [Dipt.]

30.—Alexander, C. P. Undescribed Crane-flies from Argentina (Dipt., Tipulidae). Part VIII. Ent. News Philadelphia **35** 1924 pp. 61–65.

31.—Alexander, C. P. Undescribed species of the genus *Tanypremna* Osten Sacken (Dipt., Tipulidae). Ent. News Philadelphia **35** 1924 pp. 289–291.

32.—Alexander, C. P. Undescribed species of Japanese Crane-flies. Parts IV & V. Ann. Ent. Soc. Amer. Columbus **17** pp. 59–74 & 431–484. [Dipt.]

33.—Alexander, C. P. Undescribed species of Anisopodidae from New Zealand—Part II (Diptera). Insec. Inscit. Menstr. Washington **12** 1924 pp. 10–13.

34.—Alexander, C. P. Undescribed species of Nematocera from Japan (Diptera). Insec. Inscit. Menstr. Washington **12** 1924 pp. 49–55.

35.—Alexander, C. P. Undescribed species of Nematocerous Diptera from North America and Japan. Insec. Inscit. Menstr. Washington **12** 1924 pp. 81–84.

36.—Alexander, C. P. Two undescribed species of *Tanyderus* from the Australasian Region (Diptera, Tanyderidae). Insec. Inscit. Menstr. Washington **12** 1924 pp. 141–143.

37.—Alexander, C. P. New species of Japanese Crane-flies—Part IV (Diptera, Tipulidae). Insec. Inscit. Menstr. Washington **12** 1924 pp. 150–159.

38.—Alexander, C. P. New species of two-winged flies from western North America belonging to the family Tipulidae. Proc. U. S. Nat. Mus. Washington **64** 1924 art. 10 no. 2500 16 pp. [Dipt.]

39.—Alexander, C. P. The Crane-flies of New York: second supplementary list. Bull. Brooklyn Ent. Soc. **19** 1924 pp. 57–64. [Dipt.]

40.—Alexander, C. P. New or little-known Crane-flies from Northern Japan (Tipulidae, Diptera). Philipp. J. Sci. Manila **24** 1924 pp. 531–610 2 tables 2 pls.

41.—Alexander, C. P. Studies on the Crane-flies of New Zealand: Part I (Order Diptera, Superfamily Tipuloidea). Trans. N. Zealand Inst. Wellington **55** 1924 pp. 641–660 20 figs.

42.—Alexander, C. P. New or little-known Tipulidae (Diptera).—XIX–XXV. Australasian species. Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 33–49 177–194 359–380 499–523 561–579; (9) **14** pp. 289–306 457–477.

43.—Alexander, C. P. Rept. Sci. Res. Norweg. Exped. Novaya Zemlya 1921, no. 5. The Crane-flies. Christiania **1922** pp. 1–16 3 figs. [Dipt.]

44.—Alexander, C. P. Report of the second Norwegian arctic expedition in the "Fram" 1898–1902. The Crane-flies (Tipulidae, Diptera). Norsk ent. Tidsskr. Christiania **1** (1923) 1924 pp. 296–297.

45.—Alexander, C. P. Zoological results of the Swedish Expedition to Central Africa 1921. Insecta. 6. Tipulidae (Diptera). Ark. Zool. Stockholm **16** 1924 no. 18 pp. 1–15 2 figs.

46.—Alfieri, A. Notes sur *Anister raffrayi* Grouv. et sa larve (Coléop.). Bull. Soc. R. ent. Egypte Cairo **1924** pp. 82–83 1 fig.

47.—Alfken, J. D. *Andrena rutila* Spin. und ihre Färbungsformen. (Hym. Apid.). D. ent. Zs. Berlin **1924** pp. 245–248.

48.—Alfken, J. D. *Megachile centuncularis* L. und ihre Verwandten. D. ent. Zs. Berlin **1924** pp. 355–360. [Hym.]

49.—Alfken, J. D. Zur Kenntnis der *Megachile*-Arten von Formosa. Konowia Vienna **3** 1924 pp. 10–19. [Hym.]

50. Alfken, J. D. *Andrena japonica* Alfk. ♂. Konowia Vienna **3** 1924 pp. 95–96. [Hym.]

51.—Alfken, J. D. Die vier grossen *Megachile*-Arten Deutschlands. Konowia Vienna **3** 1924 pp. 210–215. [Hym.]

52.—Alfken, J. D. Beitrag zur Kenntnis einiger Bienen Finlands. Not. ent. Helsingfors **4** 1924 pp. 33–40. [Hym.]

53.—Alinder, S. Zwei neue Coccinelliden (Col.) aus Kamerun. Mitt. münchn. ent. Ges. **14** 1924 pp. 129–130.

54.—Alluaud, C. L'aire géographique du *Carabus aumonti* Lucas (Coléoptère, Carabidae). Bull. Soc. Sci. nat. Maroc Rabat **4** 1924 pp. 40–41.

55.—d'Almeida, R. F. Contributions à l'étude des lépidoptères du Brésil. Bol. Soc. ent. Brasil Rio de Janeiro **1923** no. 4–6 (1924) pp. 13–14.

56.—d'Almeida, R. F. Les Papilionides de Rio de Janeiro. Ann. Soc. ent. France Paris **93** 1924 pp. 23–30. [Lep.]

57.—Alpatov, W. W. Die Definition der untersten systematischen Kategorien vom Standpunkte des Studiums der Variabilität der Ameisen und der Crustaceen. Zool. Anz. Leipzig **60** 1924 pp. 161–168.

58.—Altson, A. M. On the genital system of *Lyctus brunneus* Steph., with a note on *Lyctus linearis* Goeze (Coleoptera). J. Linn. Soc. (Zool.) London **35** 1924 pp. 581–597 4 pls. 4 figs.

59.—Alverdes, F. Die Wirkung experimenteller Eingriffe, insbesondere der Blendung, auf den Histologischen Bau des Insektengehirns. Zs. Morph. Oekol. Tiere Berlin **2** 1924 pp. 189–216 2 pls. 5 figs.

60.—Alverdes, F. Über des Verhalten von Libellen- und Eintagsfliegenlarven. Naturwissenschaften Berlin **12** 1924 pp. 575–576. [Ephem., Odon.]

61.—Andres, A. Tenebrioniden (Ins., Col.) aus dem nördlichen und östlichen Spanien, gesammelt von Dr. F. Haas in den Jahren 1914–1919. Senckenbergiana Frankfort o. M. **6** 1924 pp. 166–167.

62.—Andres, A. & Seitz, A. Die Lepidopteren-Fauna Ägyptens (concluded). Senckenbergiana Frankfort o. M. **6** 1924 pp. 13–83.

63.—Andrewes, H. E. Notes on Oriental Carabidae—VI. Ent. Mo. Mag. London **60** 1924 pp. 191–198. [Col.]

64.—Andrewes, H. E. On the Oriental Carabidae of the "Reise Novara." Trans. Ent. Soc. London **1923** 1924 pp. 459–468. [Col.]

65.—Andrewes, H. E. Papers on Oriental Carabidae.—XIII–XIV. Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 241–244 585–593. [Col.]

66.—Andrewes, H. E. Coleoptera of the Siju Cave, Garo Hills, Assam. I. Carabidae. Rec. Ind. Mus. Calcutta **26** 1924 pp. 115–117.

67.—Andrewes, H. E. Mission dans les Provinces Centrales de l'Inde et dans la région occidentale de l'Himalaya 1914 par Guy Babault. Carabidae. Paris 1924 pp. 1–117 4 pls.

68.—Andrewes, H. E. Description of some new Carabidae from Ceylon. Spolia Zeylanica Colombo **13** 1924 pp. 129–141. [Col.]

69.—Andrewes, H. E. & Scott, H. A list of Carabidae from Macao, South China, with a description of a new species and biological notes. Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 466–472. [Col.]

70.—Annand, P. N. A new *Chermes* from pine (Hemiptera, Aphidae). Canad. Ent. Orillia **56** 1924 pp. 5–6.

71.—Annand, P. N. A new species of *Adelges* (Hemiptera, Phylloxeridae). Pan-Pacific Ent. S. Francisco **1** 1924 pp. 79–82 1 pl.

72.—Annandale, N. Termite mounds. J. Bombay Nat. Hist. Soc. **30** 1924 pp. 25–35 4 figs. [Isop.]

73.—Arendsen Hein, S. A. Selektions-Versuche mit Prothorax- und Elytra-Variationen bei *Tenebrio molitor*. Ent. Mitt. Berlin **13** 1924 pp. 152–193 242–269 79 figs. [Col.]

74.—Arendsen Hein, S. A. Studies on variation in the mealworm *Tenebrio molitor*. II. Variations in tarsi and antennae. J. Genetics Cambridge **14** 1924 pp. 1–38 19 figs. [Col.]

75.—Arnold, J. Der Eichenprozessionsspinner. Intern. ent. Zs. Guben **18** 1924 pp. 174–176. [Lep.]

76.—Arnošt, J. *Brachynus* (*Pseudoaptinus* Porta) *matchai* sp. n. (Carabidae, Coleoptera). Casopis Prague **21** 1924 pp. 5–6.

77.—Arrow, G. J. On the *Stethaspis* group of Melolonthid Coleoptera. Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 546–553.

78.—Arrow, G. J. Vocal organs in the Coleopterous families Dytiscidae, Erotylidae and Endomychidae. Trans. Ent. Soc. London **1924** pp. 134–143 2 figs.

79.—Ashby, E. B. Digne and the Basses Alps in July 1923. Ent. Rec. London **36** 1924 pp. 102–106 122–126.

80.—Ashton, H. Notes on the "Hairy Cicada" (*Tettigarcta crinita*). Proc. R. Soc. Vict. Melbourne **36** 1924 pp. 238–239. [Hom.]

81.—Aurivillius, C. Neue oder wenig bekannte Coleoptera Longicornia. 19. Ark. Zool. Stockholm **15** no. 25 1924 43 pp. 21 figs.

82.—Aurivillius, C. Fauna Simalurensis. Cerambycidae. Zool. Meded. Leiden **8** 1924 pp. 18–23. [Col.]

83.—Aurivillius, C. Cerambyciden aus Sumatra gesammelt von Edw. Jacobson bestimmt und beschrieben. Zool. Meded. Leiden **8** 1924 pp. 24–35. [Col.]

84.—Aurivillius, C. Lycaenidae in Seitz, Die Gross-schmetterlinge der Erde. Fauna africana **13** 1923 pp. 401–416, 433–448; 1924 pp. 417–432. [Lep.]

85.—Austen, E. E. Additional records of Palestine Tabanidae with descriptions of new species. Bull. Ent. Res. London **14** 1924 pp. 421–432 4 figs. [Dipt.]

86.—Austin, G. D. The Indian Glow-worm (*Lamprophorus tenebrosus* Wlk.). Year-book Dept. Agric. Ceylon Peradeniya **1924** pp. 68–69 1 pl. [Col.]

Austin, G. D. *see* Hutson & Austin.

87.—Babault, G. Cicindelidae. Voy. Babault Afrique or. angl. Paris **1921** pp. 1–14 1 pl. [Col.]

88.—Baer, W. Ueber das Bohrgeschäft von *Ephialtes*. Zs. angew. Ent. Berlin **10** 1924 pp. 458–460. [Hym.]

89.—Baerg, W. J. On the life history and the poison apparatus of the white flannel Moth, *Lagoa crispata* Packard. Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 403–411 4 figs. 3 pls. [Lep.]

90.—Bagnall, R. S. The genus *Melanothrips* with description of a new sp. Ent. Mo. Mag. London **60** 1924 pp. 9–11. [Thysanopt.]

91.—Bagnall, R. S. Some new or little-known British Thysanoptera. Ent. Mo. Mag. London **60** 1924 pp. 113–116 269–275.

92.—Bagnall, R. S. Fossil Thysanoptera. II–III. Terebrantia, Pts. 2–3. Ent. Mo. Mag. London **60** 1924 pp. 130–133 251–252.

93.—Bagnall, R. S. On a new species of *Rhipidothrips* (*R. kellyanus* sp. n.) from Australia. Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 584–585. [Thysanopt.]

94.—Bagnall, R. S. Von Schlechtendal's work on fossil Thysanoptera in the light of recent knowledge. Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 156–162.

95.—Bagnall, R. S. Brief descriptions of new Thysanoptera. Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 625–640.

96.—Bagnall, R. S. On a new injurious thrips affecting tea in India. Bull. Ent. Res. London **14** 1924 p. 455. [Thysanopt.]

97.—Bagnall, R. S. & **Harrison,** J. W. H. New British Cecidomyiidae. Ent. Rec. London **36** 1924 pp. 36–38 53–55 99–102 (contd.). [Dipt.]

98.—Baguena Corella, L. Una nueva forma de *Cicindela flexuosa lurida.* Bol. R. Soc. esp. Hist. nat. Madrid **24** 1924 pp. 393–394 3 figs. [Col.]

Bailey, I. W. *see* Swaine, Craighead & Bailey.

99.—Baker, C. F. Second addition to Philippine and Malayan technical bibliography. Philip. Agric. Los Baños **7** 1924 pp. 311–314.

100.—Baker, C. F. The genus *Makilingia* (Jassoidea) in the Philippines. Philip. J. Sci. Manila **24** 1924 pp. 57–70 2 pls. [Hom.]

101.—Baker, C. F. Remarks on the Tettigometridae (Fulgoroidea). Philip. J. Sci. Manila **24** 1924 pp. 91–99 1 pl. [Hom.]

102.—Baker, C. F. Nomenclatorial notes on the Jassoidea. Philip. J. Sci. Manila **24** 1924 p. 367. [Hom.]

103.—Baldus, K. Untersuchungen über Bau und Funktion des Gehirnes der Larve und Imago von Libellen. Zs. wiss. Zool. Leipzig **121** 1924 pp. 557–620 2 pls. 4 figs. [Odon.]

104.—Baliani, A. Una nuova specie di *Amara* [Coleopt., Carabidae]. Boll. Soc. ent. ital. Genoa **56** 1924 p. 64 1 fig.

105.—Ball, E. D. The correct names of the leafhoppers infesting the apple and potato. J. Econ. Ent. Geneva N.Y. **17** 1924 pp. 594–600. [Hom.]

106.—Ball, F. *Lycaena coridon* et *hispana* ? en Belgique. Bull. Soc. ent. Belg. Brussels **6** 1924 pp. 29–32. [Lep.]

107.—Bandermann, F. Drei neue Aberrationen von *Celerio euphorbiae* L. Intern. ent. Zs. Guben **18** 1924 pp. 3–4. [Lep.]

108.—Bandermann, F. *Lymantria dispar* ab. *eremita.* Intern. ent. Zs. Guben **18** 1924 p. 30. [Lep.]

109.—Bandermann, F. Eine merkwürdige Aberration vom Weisslinge *Pieris rapae.* Intern. ent. Zs. Guben **18** 1924 p. 116. [Lep.]

110.—Bandermann, F. *Lymantria dispar* ab. *flava.* Ent. Zs. Frankfort o. M. **37** 1924 pp. 49–50. [Lep.]

111.—Banks, N. Descriptions of new Neuropteroid insects. Bull. Mus. Comp. Zool. Cambridge Mass. **65** 1924 pp. 421–455 4 pls.

112.—Banks, N. Neuroptera from the Williams Galapagos Expedition. Zoologica New York **5** 1924 pp. 177–180 1 pl.

113.—Bänninger, M. Di alcune specie di *Nebria* e *Leistus* della regione mediterranea. 8° Contributo alla conoscenza dei Carabini (Col.). Boll. Soc. ent. ital. Genoa **56** 1924 pp. 97–106.

114.—[Baranov, N.] Баранов, Н. Голубачка мушица (*Simulium columbaczense* sensu latiore). Glasnik Minist. Pojoprivrede i Voda Belgrade **2** 1924 pp. 55–68 7 figs. [Dipt.] [In Serbian, with English summary.]

115.—Barber, G. W. *Doratura stylata* Bohm in Massachusetts. Psyche Boston **31** 1924 p. 170. [Hem.]

116.—Barber, G. W. Notes on *Piesma cinerea* Say. Psyche Boston **31** 1924 pp. 229–232 2 figs. [Hem.]

117.—Barber, H. G. Report on certain families of the Hemiptera—Heteroptera collected by the Barbados–Antigua Expedition from the University of Iowa in 1918. Univ. Iowa Studies Nat. Hist. **10** no. 3 1923 pp. 17–29.

118.—Barber, H. G. Corrections and comments. Hemiptera-Heteroptera. J. New York Ent. Soc. **32** 1924 pp. 133–137.

119.—Barber, H. G. Two new species of *Cymus* (Hemiptera-Lygaeidae). Bull. Brooklyn Ent. Soc. **19** 1924 pp. 87–90.

120.—Barber, H. G. A new species of *Pselliopus* (Hemiptera : Reduviidae). Proc. Ent. Soc. Washington **26** 1924 pp. 211–213.

121.—**Barber,** H. S. New Ptiliidae related to the smallest known beetle. Proc. Ent. Soc. Washington **26** 1924 pp. 167–178 2 pls.

122.—**Barber,** H. S. The generic names of the clover and alfalfa weevils *Hypera* and *Phytonomus.* Proc. Ent. Soc. Washington **26** 1924 p. 216. [Col.]

123.—**Barnes,** H. F. Some observations on the mating habits and oviposition of the Limnobiidae (Diptera). Ent. Mo. Mag. London **60** 1924 pp. 71–74.

124.—**Barnes,** H. F. On the occurrence of mites on crane-flies. Ent. Mo. Mag. London **60** 1924 pp. 135–137. [Dipt.]

125.—**Barnes,** H. F. Preliminary list of the crane-flies of Carnarvonshire, N. Wales. Ent. Mo. Mag, London **60** 1924 pp. 225–227. [Dipt.]

126.—**Barnes,** W. & **Benjamin,** F. H. On the synonymy of the monarch butterfly (Danaidae, Lepid.). Canad. Ent. Orillia **56** 1924 p. 16.

127.—**Barnes,** W. & **Benjamin,** F. H. The North American and Greenland species of *Sympistis* (Lepidoptera). Canad. Ent. Orillia **56** 1924 pp. 212–215.

128.—**Barnes,** W. & **Benjamin,** F. H. A new *Oiketicus* from Texas (Lepid. Psychidae). Bull. Brooklyn Ent. Soc. **19** 1924 pp. 24–25.

129.—**Barnes,** W. & **Benjamin,** F. H. A new Sphingid from Nevada (Lepid.). Proc. Ent. Soc. Washington **26** 1924 p. 166.

130.—**Barnes,** W. & **Benjamin,** F. H. Notes on the genus *Noctuelia* (Lepidoptera: Pyralidae). Proc. Ent. Soc. Washington **26** 1924 pp. 205–206.

131.—**Barnes,** W. & **Benjamin,** F. H. On the correct name for the brown-tail moth. Proc. Ent. Soc. Washington **26** 1924 p. 213. [Lep.]

132.—**Barnes,** W. & **Benjamin,** F. H. On the synonymy of *Polia nimbosa* Guenée (Phalaenidae = Noctuidae, Lepid.). Ent. News Philadelphia **35** 1924 pp. 7–8.

133.—**Barnes,** W. & **Benjamin,** F. H. New species and forms of Lepidoptera (Heterocera). Ent. News, Philadelphia **35** 1924 pp. 12–18.

134.—**Barnes,** W. & **Benjamin,** F. H. On the synonymy of *Prodenia eridania* Cram. (Lep., Phalaenidae = Noctuidae). Ent. News, Philadelphia **35** 1924 pp. 102–103.

135.—**Barnes,** W. & **Benjamin,** F. H. On the retention of ii or i in specific patronymic names. Ent. News, Philadelphia **35** 1924 pp. 103–104.

136.—**Barnes,** W. & **Benjamin,** F. H. Notes on *Phaedrotes piasus* Bdv. (Lepid.: Lycaenidae). Ent. News Philadelphia **35** 1924 pp. 232–233.

137.—**Barnes,** W. & **Benjamin,** F. H. U. S. records of *Pholisora ascalaphus* Staud. (Lepid.: Hesperiidae). Ent. News Philadelphia **35** 1924 p. 370.

138.—**Barraud,** P. J. A revision of the Culicine Mosquitoes of India. Parts VIII–XVII. Ind. J. Med. Res. Calcutta **11** 1924 pp. 845–865 971–976 977–978 979–998 1259–1274 & 1275–1282 18 pls.; **12** 1924 pp. 15–22 39–46 139–142 4 pls. pp. 427–434 3 pls. [Dipt.]

139.—**Barraud,** P. J. A new mosquito from Kashmir. Ind. J. Med. Res. Calcutta **11** 1924 pp. 967–968 1 fig. [Dipt.]

140.—**Barraud,** P. J. Four new mosquitoes from the western Himalayas. Ind. J. Med. Res. Calcutta **11** 1924 pp. 999–1006 1 fig. [Dipt.]

141.—**Barraud,** P. J. A new mosquito from Kashmir and the North-west Frontier Province. Ind. J. Med. Res. Calcutta **12** 1924 pp. 73–74. [Dipt.]

142.—**Barrett,** D. E. *Omocestus rufipes* (Zett.) and other Orthoptera in Hertfordshire. Trans. Herts. Nat. Hist. Soc. Watford **17** 1923 pp. 331–332.

143.—**Bartenev,** A. N. Libellulidae II. Faune Russie. Insecta Pseudoneuroptera, Petrograd **1** 1919 pp. 353–576 68 figs. [In Russian.]

144.—**Barthe,** E. Procédés de chasse, d'élévage, de préparation et de conservation. Misc. ent. Castanet-Tolosan **27** 1924 pp. 89–91.

145.—**Bathellier,** J. Sur le développement de l'*Eutermes matangensis.* C. R. Acad. Sci. Paris **179** 1924 pp. 483–485. [Isop.]

146.—Bathellier, J. Sur le développement de *Macrotermes gilvus* Hag. comparé à celui de l'*Eutermes matangensis* Hav. C.R. Acad. Sci. Paris **179** 1924 pp. 609–612. [Isop.]

147.—Bather, F. A. The meaning of the terms "binary" and "binominal" as applied to biological nomenclature. J. Linn. Soc. London **36** 1924 pp. 29–35.

148.—Baudrimont, A. Sur la "musique" du hanneton du pin. Sur le bruissement de l'*Anoxia villosa* Fabr. Sur le prione tanneur; sa façon de protester. Proc.-verb. Soc. Linn. Bordeaux **75** 1923 pp. 174–185 4 figs. pp. 216–219.

149.—Bauer, —. Börners Immuntheorie und Reblausarten. Kritische Beleuchtung der Naumburger Reblaustheorien. Weinbau u. Kellerwirtsch. Freiburg i. Br. **3** 1924 separate 7 pp. [Hom.]

150.—Baumann, C. Über den Bau des Abdomens und die Funktion des Legeapparates von *Thalessa leucographa* Grav. Zool. Anz. Leipzig **58** 1924 pp. 149–161 5 figs. [Hym.]

151.—Bayer, K. *Chrysophanus dispar rutilus* (gen. vern.) ab. nov. *albidoflava* ♀. Verh. zool.-bot. Ges. Wien **73** (1923) 1924 p. (21). [Lep.]

152.—Bayer, M. Über die Morphologie des Femur–Tibia–Gelenkes der Coleopteren. Zs. Morph. Oekol. Tiere Berlin **1** 1924 pp. 373–427 109 figs.

153.—Baylis, H. A. Colour-production in Lepidoptera. Entomologist, London **57** 1924 pp. 2–6 29–34 52–56, 78–82.

154.—Beamer, R. H. A new variety of Cicada. Canad. Ent. Orillia **56** 1924 pp. 200–202. [Hom.]

155.—Beaulne, J. I. Les Coléoptères du Canada. [Continued.] Nat. canad. Quebec **50** 1924 pp. 163–167 185–191 213–215 236–239 259–263 273–279; **51** 1924 pp. 65–70 92–95 110–116 141–143.

156.—Becker, T. Revision der Loew'schen Diptera Asilica in Linnaea Entomologica 1848–49. Vienna 1923 91 pp. 5 pls.

157.—Becker, T. Neue Dipteren meiner Sammlung. Mitt. zool. Mus. Berlin **10** 1921 pp. 1–93 29 figs.

158.—Becker, T. H. Sauter's Formosa - Ausbeute: Pipunculidae (Dorylaidae: Diptera). Ent. Mitt. Berlin **13** 1924 pp. 14–18.

159.—Becker, T. H. Sauter's Formosa-Ausbeute: Ephydridae (Diptera). Ent. Mitt. Berlin **13** 1924 pp. 89–93.

160.—Becker, T. H. Sauter's Formosa-Ausbeute: Chloropidae (Dipt.) Ent. Mitt. Berlin **13** 1924 pp. 117–124.

161.—Becker, T. Dolichopodidae von Formosa. Zool. Meded. Leiden **8** 1924 pp. 120–131. [Dipt.]

162.—Becker, T. Neue Dipteren meiner Sammlung. Konowia Vienna **2** 1923 pp. 15–24, 171–179.

163.—Beebe, W. Notes on Galapagos Lepidoptera. Zoologica New York **5** 1924 pp. 51–59 1 pl.

164.—Bell, T. R. The common butterflies of the plains of India (including those met with in the Hill stations of the Bombay Presidency). J. Bombay Nat. Hist. Soc. **29** 1924 pp. 921–946; **30** 1924 pp. 132–150.

165.—Bellesme, J. de. Des conditions de la locomotion aérienne chez les insectes. C.R. Acad Sci. Paris **178** 1924 pp. 968–970.

166.—Bellesme, J. de. Sur les différences entre le vol des insectes et celui de l'aéroplane. C.R. Acad. Sci. Paris **178** 1924 pp. 1063–1064.

167.—Belling, H. Einiges vom Gletscherfalter, *Oeneis aello* Hb. (Lep.). D. ent. Zs. Berlin **1924** pp. 322–328.

168.—Benander, P. Zur Biologie einiger Kleinschmetterlinge. Ent. Tidsk. Stockholm **45** 1924 pp. 169–177. [Lep.]

169.—Bénard, G. Description d'une nouvelle espèce de *Polyhirma* de l'Erythrée italienne (Col., Carabidae). Bull. Soc. ent. France Paris **1924** pp. 52–53 2 figs.

170.—Benderitter, E. Rutélides nouveaux (11e note). Bull. Soc. ent. France, Paris **1924** pp. 136–137. [Col.]

171.—Benderitter, E. Rutélides africains (12e note). Bull. Soc. ent. France Paris **1924** pp. 226–228. [Col.]

172.—Bengtsson, S. Braconologische Notizen. Ent. Tidsk. Stockholm **45** 1924 pp. 35–38. [Hym.]

173.—Benick, L. H. Friebs *Stenus*-Ausbeute in sibirischer Kriegsgefangenschaft. D. ent. Zs. Berlin **1924** pp. 249–258. [Col.]

Benjamin, F. H. *see* Barnes & Benjamin.

174.—Benoist, R. Sur la provenance de quelques Hyménoptères Mellifères décrits par J. Pérez. Bull. Soc. ent. France Paris **1924** pp. 109–111.

175.—Bequaert, J. Notes upon Surcouf's treatment of the Tabanidae in the Genera Insectorum and upon Enderlein's proposed new classification of this family. Psyche Boston **31** 1924 pp. 24–40. [Dipt.]

176.—Bequaert, J. Galls that secrete honeydew. Bull. Brooklyn Ent. Soc. **19** 1924 pp. 101–124.

177.—Bequaert, J. Description de deux Pangoniines (Tabanides) nouvelles du Bas-Congo. Rev. zool. afr. Brussels **12** 1924 pp. 461–468. [Dipt.]

178.—Bergevin, E. de. A propos de quelques Typhlocybinae (Hémiptères-homoptères) nuisibles à la vigne. Bull. Soc. Hist. nat. Afr. Nord Algiers **15** 1924 pp. 107–111 5 figs.

179.—Bergevin, E. de. Description d'une nouvelle espèce de *Parorgerius* (Hémiptère, Dictyopharinae) du Grand Atlas marocain. Bull. Soc. Hist. nat. Afr. Nord, Algiers **15** 1924 pp. 255–258 1 pl.

180.—Bergevin, E. de. Nouvelles observations sur les Hémiptères suceurs de sang humain. Bull. Soc. Hist. nat. Afr. Nord, Algiers **15** 1924 pp. 259–262 1 fig.

181.—Bergevin, E. de. Description de deux espèces nouvelles d'Hémiptères d'Egypte. Bull. Soc. R. ent. Egypte Cairo **1924** pp. 94–102 5 figs.

182.—Bergmann, A. *Agrotis cuprea* in Thüringen. Intern. ent. Zs. Guben **17** 1924 pp. 166–168. [Lep.]

183.—Bergroth, E. On the Isometopidae (Hem. Het.) of North America. Not. ent. Helsingfors **4** 1924 pp. 3–9, 4 figs.

184.—Bergroth, E. A new genus of Peloridiidae (Hem.-Het.) from New Zealand. Ent. Mo. Mag., London **60** 1924 pp. 178–181.

185.—Bergroth, E. Ueber einige neue oder wenig gekannte Heteroptera in Dr. W. Stichel's Sammlung. N. Beitr. syst.-Insektenk. Berlin **3** 1924 pp. 33–38.

186.—Bergroth, E. Some Heteroptera from the alpine region of central Luzon. Ann. Soc. ent. Belg. Brussels **64** 1924 pp. 82–84.

187.—Berland, L. Notes sur les Hyménoptères fouisseurs de France. IV. Ann. Soc. ent. France Paris **92** (1923) 1924 pp. 363–364.

188.—Berlese, A. Considerazioni sulla evoluzione degli organismi. Redia Florence **15** 1924 pp. 115–175.

189.—Berlese, A. *et al.* Entomologia Agraria. Manuale sugli insetti nocivi alle piante coltivate, campestri, orticole ed ai loro prodotti e modo di combatirli. Florence 1924 2nd Edn. 512 pp. 420 figs.

190.—Bernet Kempers, K. J. W. Das Flügelgeäder der Käfer. Ent. Mitt. Berlin **13** 1924 pp. 45–63 1 pl. [Col.]

191.—Bertolini, F. Ricerche sulla struttura del tegumento delle larve di *Pieris brassicae.* Redia Florence **15** 1924 pp. 69–71. [Lep.]

192.—Bertrand, H. Larve et nymphe d' *Haliplus lineaticollis,* Marsh. (Coléopt.). Ann. Soc. ent. France Paris **92** (1923) 1924 pp. 321–338 27 figs. 2 pls.

193.—Bertrand, H. Anomalies chez des larves et nymphes de Coléoptères. Ann. Soc. ent. France Paris **92** (1923) 1924 pp. 339–344 9 figs.

194.—Bertrand, H. Eclosion de l'œuf chez quelques Chrysomélides (Col.). Bull. Soc. ent. France Paris **1924** pp. 54–57 13 figs.

195.—Bethune-Baker, G. T. Descriptions of new African Rhopalocera. Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 130–135. [Lep.]

196.—Beuret, H. Myrmekophilie bei *Lycaena argus* L. Schweiz ent. Anz. Dübendorf-Zürich **3** 1924 pp. 54–55. [Lep.]

197.—Bezzi, M. Contributo allo studio della Fauna Libica. Ditteri di Cirenaica. Mem. Soc. ent. ital. Genoa **1** 1922 pp. 140–157 1 fig. [Dipt.]

198.—Bezzi, M. The Bombyliidae of the Ethiopian Region. Brit. Mus. (Nat. Hist.) 1924 viii + 390 pp. 46 figs. [Dipt.]

199.—Bezzi, M. A new species of the Drosophilid genus *Gitona* (Diptera) bred from figs in Cyprus. Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 254–256 2 figs.

200.—Bezzi, M. Further notes on the Ethiopian fruit-flies with keys to all the known genera and species. Bull. Ent. Res. London **15** 1924 pp. 73–118, 121–155. [Dipt.]

201.—Bezzi, M. Trypanéides d'Afrique (Dipt.) de la collection du Muséum National de Paris. Bull. Mus. Hist. nat. Paris **1924** pp. 88–91.

202.—Bezzi, M. Deux nouveaux Micropézides du Brésil présentant de remarquables caractères sexuels secondaires. Encyc. ent. Sér. B. **2** Dipt. **1**. Paris Lechevalier 1924 pp. 73–77 2 figs. [Dipt.]

203.—Bezzi, M. Sur quelques Trypanéides (Dipt.) du Musée du Congo Belge. Rev. zool. afr. Brussels **12** 1924 pp. 9–16.

204.—Bezzi, M. Les Phytalmiides africains des genres *Clitodoca* et *Phytalmodes* (Dipt.). Rev. zool. afr. Brussels **12** 1924 pp. 225–239 7 figs.

205.—Bezzi, M. Deux *Syllegomydas* inédits d'Egypte (Dipt.). Bull. Soc. R. ent. Egypte Cairo **1923** 1924 pp. 157–166.

206.—Bezzi, M. The South African Nemestrinidae (Diptera) as represented in the South African Museum. Ann. S. Afr. Mus. Cape Town **19** 1924 pp. 164–190.

207.—Bezzi, M. The South African Mydaidae (Diptera) as represented in the South African Museum. Ann. S. Afr. Mus. Cape Town **19** 1924 pp. 191–234.

208.—Bezzi, M. South African Trypaneid Diptera in the Collection of the South African Museum. Ann. S. Afr. Mus. Cape Town **19** 1924 pp. 449–577 4 pls.

209.—Bieżanko, C. M. v. Über neue melanotische Aberrationen von Arctiidae. Polsk. Pismo ent. Lemberg **3** 1924 pp. 68–75 1 pl. [Lep.]

210.—Bieżanko, C. M. v. Neue Aberrationen von Gross-schmetterlingen. Arch. Natg. Berlin Abt. A. **90** 1924 Heft 5 pp. 241–242 2 pls. [Lep.]

211.—Bieżanko, C. M. v. Kleine Notizen über die in Wyczolki bei Warschau gesammelten und beobachteten Gross-schmetterlinge. (Beitrag zur Kenntnis der Lepidopteren fauna Polens.) Arch. Natg. Berlin Abt. A. **90** 1924 Heft 5 pp. 243–245.

212.—Binder, A. & **Haase,** J. Vom Sammler zum Lokalfaunisten. Intern. ent. Zs. Guben **17** 1924 pp. 187–189, 197–201 ; **18** 1924 pp. 1–3.

213.—Bischoff, W. Die belgische *Liponeura* (Blepharoceridae [Dipt.]) Lestages und Rousseau ; nicht *Liponeura cinerascens* Lw., sondern eine neue Art : *Liponeura belgica* nov. spec., sowie einige Notizen über die paläarktischen *Liponeura*-Arten. Zool. Anz. Leipzig **58** 1924 pp. 253–261 6 figs ; **59** 1924 pp. 280–281.

214.—Bischoff, W. Die Segmentierung der Blepharoceriden-Larven und -Puppen und die ökologische Begründung der Larvenphylogenie. Zool. Anz. Leipzig **60** 1924 pp. 231–251 6 figs. [Dipt.]

215.—Blair, K. G. Some coleopterous remains from the peat-bed at Wolvercote, Oxfordshire. Trans. Ent. Soc. London **1923** 1924 pp. 558–563.

216.—Blair, K. G. Coleopterous larvae from the burrows of *Xylocopa aestuans*. Trans. Ent. Soc. London **1924** pp. 149–150. [Col.]

217.—Blair, K. G. Some notes on luminosity in insects. Ent. Mo. Mag. London **60** 1924 pp. 173–178.

218.—Blair, K. G. Coleoptera of the Siju Cave, Garo Hills, Assam. IV. Histeridae, Hydrophilidae, Erotylidae, Lathridiidae, Tenebrionidae, and Hylophilidae. Rec. Ind. Mus. Calcutta **26** 1924 pp. 120–122.

219.—Blaisdell, F. E. Two new species of Melyridae from California and one from British Columbia including two new genera. Canad. Ent. Orillia **56** 1924 pp. 1–5. [Col.]

220.—Blaisdell, F. E. Studies in the Melyridae (Coleoptera). Pan-Pacific Ent. S. Francisco **1** 1924 pp. 15–21.

221.—Blaisdell, Sr., F. E. New forms of *Coniontus* (Coleoptera). Pan-Pacific Ent. S. Francisco **1** 1924 pp. 83–87.

222.—Blaisdell, Sr., F. E. A new *Centrioptera* from Texas. Pan-Pacific Ent. S. Francisco **1** 1924 pp. 87–88. [Col.]

223.—Blaisdell, Sr., F. E. New Melyrids from south-eastern California. Proc. Cal. Acad. Sci. San Francisco (4) **13** 1924 pp. 249–259. [Col.]

224.—Blaisdell, Sr., F. E. Studies on the Melyridae (Coleoptera). No. 4. Trans. Amer. Ent. Soc. Philadelphia **50** 1924 pp. 313–318.

225.—Blake, D. H. Note on the habits of *Sphenophorus pontederiae* Chttn. Psyche Boston **31** 1924 p. 311 [Col.]

226.—Blatchley, W. S. Some new Halticini from Indiana and Ontario. J. New York Ent. Soc. **32** 1924 pp. 90–92.

227.—Blatchley, W. S. Notes on the Orthoptera of the Eastern United States J. New York Ent. Soc. **32** 1924 pp. 127–132.

228.—Blatchley, W. S. New Coleoptera from southern Florida with notes on other interesting species. Canad. Ent. Orillia **56** 1924 pp. 164–170.

229.—Blatchley, W. S. Some apparently new Heteroptera from Florida. Ent. News Philadelphia **35** 1924 pp. 85–90.

230.—Blatchley, W. S. The Chrysomelidae of Florida. Florida Ent. Gainesville **7** 1924 pp. 33–39 & 49–57; **8** 1924 pp. 1–7 & 17–23. [Col.]

231.—Bledowski, R. & **Krainska,** K. Materjay do fauny Ichneumonidów Polski (Cz. I. Podrodziny Ichneumoninae i Pimplinae). Polsk. Pismo ent. Lemberg **3** 1924 pp. 37–56. [Hym.]

232.—Blunck, H. Lebensdauer, Fortpflanzungsvermögen und Alterserscheinungen beim Gelbrand (*Dytiscus marginalis* L.) Zool. Anz. Leipzig **58** 1924 pp. 163–169. [Col.]

233.—Blunck, H. & **Speyer,** W. Kopftransplantation bei Insekten. 1. Beilage z. Jahresber. 1924 Naturwiss. Vereins Naumburg a. S. 1924 4 pp.

234.—Blunck, H. & **Speyer,** W. Kopftausch und Heilungsvermögen bei Insekten. Zs. wiss. Zool. Leipzig **123** 1924 pp. 156–208 2 figs.

235.—Blüthgen, P. Beiträge zur Systematik der Bienengattung *Halictus* Latr. (Hym.) Konowia Vienna **2** 1923 pp. 65–81, 123–142; **3** 1924 pp. 53–64, 76–95, 253–284.

237.—Blüthgen, P. Über *Andrena dobrowlanensis* Nosk., *A. freya* Strand, und einige andere Sandbienenarten (Hym. Apidae). D. ent. Zs. Berlin **1924** pp. 180–183.

238.—Blüthgen, P. Contribución al conocimiento de las especies españolas de *Halictus* (Hymenoptera Apidae). Mem. R. Soc. esp. Hist. nat. Madrid **11** 1924 pp. 332–544.

239.—Blüthgen, P. Notas sobre *Halictus* paleárticos. (Hymenopt. Apidae). Bol. R. Soc. esp. Hist. nat. Madrid **24** 1924 pp. 262–266.

240.—Blüthgen, P. *Sphecodes zablockii* nov. spec. ♀ und *Sph. croaticus* Meyer ♀ (Hym. Apidae). Polsk. Pismo ent. Lemberg **2** 1924 pp. 188–190.

241.—Bodenheimer, F. Beiträge zur Kenntnis der Kohlschnake (*Tipula oleracea* L.). Arch. Natg. Berlin Abt. A. **90** 1924 Heft 2 pp. 61–108 20 figs. [Dipt.]

242.—Bodenheimer, F. Beiträge zur Kenntnis der Kohlschnake (*Tipula oleracea* L.). Zur Anatomie und Oekologie der Imago. Zs. wiss. Zool. Leipzig **121** 1924 pp. 393–441 25 figs. [Dipt.]

243.—Bodenheimer, F. S. Ueber die Voraussage der Generationenzahl von Insekten. II. Die Temperaturentwicklungskurve bei medizinisch wichtigen Insekten. Centralbl. Bakt. Abt. 1 Jena **93** 1924 pp. 474–480 9 figs.

244.—Bodenheimer, F. S. The Coccidae of Palestine. Zionist Organisation Inst. Agric. & Nat. Hist., Agric. Expt. Sta., Tel-Aviv, Palestine Bull. **1** 1924 pp. 1–100 12 pls. 45 figs.

245.—Bodine, J. H. Anesthetics and CO_2 output. II. Decreased carbon dioxide output and recovery from ether in certain Orthoptera. J. Exp. Zool. Philadephia **38** 1923 pp. 413–421 5 figs.

246.—[Bogdanov-Katkov, N. N.] Богданов-Катьков, Н. Н. Русская литература по прикладной энтомологии. [Russian Literature on Applied Entomology.] Государств. Издательство [Govt. Pubn.] Leningrad, 1924 224 pp.

247.—Bois-Reymond, P. du. Ueber die Variabilität von *Agrotis chardinyi* Bsd. Zs. wiss. Insektenbiol., Berlin **19** 1924 pp. 95–98. [Lep.]

248.—Bokor, E. Ueber einen neuen, blinden Höhlenkäfer Ungarns. Folia ent. hungarica Budapest **1** 1924 pp. 28–32. [Col.]

249.—Bokor, E. Beiträge zur rezenten Fauna der Abaligeter Grotte. Zool. Anz. Leipzig **61** 1924 pp. 111–121.

250.—Boldori, L. Contributo alla conoscenza della fauna cavernicola lombarda. Larva del *Duvalius carminatii* ssp. *humeralis* Dod. Boll. Soc. ent. ital. Genoa **56** 1924 pp. 145–148 1 fig. [Col.]

251.—Bolivar, I. Orthoptera Dictyoptera (Blattidae and Mantidae) and Supplement to Gryllidae, of the Seychelles and adjacent Islands. Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 313–359 38 figs.

252.—Bolton, H. On a new form of Blattoid from the coal measures of the Forest of Dean. Q. J. Geol. Soc. London **80** 1924 pp. 17–21 1 pl. [Orthop.]

253.—Bondar, G. O "mosaico" provocado pelo thysanoptero *Euthrips manihoti* sp. n. Chacaras e Quintaes S. Paulo **30** 1924 pp. 216–218 2 figs.

Bonnamour, S. *see* Gautier & Bonnamour.

254.—Bonne, C. Note on *Culex flavipes*, Macquart (Diptera Culicidae). Insec. Insc. Menst. Washington **12** 1924 p. 85.

255.—Bonne, C. The larva of *Aëdes* (*Ochlerotatus*) *eucephaleus* Dyar and *Aëdes* (*Ochlerotatus*) *hortator* Dyar & Knab (Diptera, Culicidae). Insec. Insc. Menst. Washington **12** 1924 pp. 169–170.

256.—Bonnier, G. Contributions to the knowledge of intra- and interspecific relationships in *Drosophila*. Act. Zool. Stockholm **5** 1924 pp. 1–122 4 pls. 42 figs. 9 diagrams. [Dipt.]

257.—Borcea, I. Quelques remarques sur le microlépidoptère *Homoeosoma nebulella* Hb. Ann. sci. Univ. Jassy **13** 1924 pp. 199–206.

258.—Borgmeier, T. Catalogo systematico e synonymico das formigas do Brasil. Ia Parte. Subfam. Dorylinae, Cerapachyinae, Ponerinae, Dolichoderinae. Arch. Mus. Nac. Rio de Janeiro **24** 1923 pp. 33–103. [Hym.]

259.—Borgmeier, T. Novos generos e especies de Phorideos do Brazil. Bol. Mus. Nac. Rio de Janeiro **1** 1924 pp. 167–202 23 figs. [Dipt.]

260.—Borgmeier, T. Um novo genero de Phorideos de Paranà (Dipt.), com uma nota previa sobre um novo genero ecitophilo da Argentina. Bol. Mus. Nac. Rio de Janeiro **1** 1924 pp. 283–288 2 figs.

261.—Borgmeier, T. Drei neue Phoriden aus Brasilien. Soc. ent. Stuttgart **39** 1924 pp. 13–15, 17–19 6 figs. [Dipt.]

262.—Born, P. Zwei wenig bekannte Orinocaraben. Schweizer ent. Anz. Zürich **3** 1924 pp. 13–15. [Col.]

263.—Born, P. Drei neue Formen von Carabini aus Spanien und Portugal. Soc. ent. Stuttgart **39** 1924 pp. 9–10. [Col.]

264.—Bott, R. Entwicklungsgeschichte unter besondere Berücksichtigung der Verhältnisse bei den Lepidopteren. Intern. ent. Zs. Guben **18** 1924 pp. 161–164.

266.—Boucomont, A. Synonymies et homonymies de Lamellicornes Coprophages (Col.). Bull. Soc. ent. France Paris **1924** pp. 114–115.

267.—Boucomont, A. Lamellicornes coprophages d'Indochine. Bull. Soc. ent. France Paris **1924** pp. 210–214. [Col.]

268.—Boucomont, A. *Ataenius corporaali,* nov. sp. de Sumatra. Tijdschr. Ent. The Hague **67** 1924 pp. 118–119. [Col.]

269.—Boucomont, A. Les *Onthophagus* (Coleoptera, Scarabaeidae) des Iles Philippines. Philipp. J. Sci. Manila **24** 1924 pp. 669–681.

270.—Bourgoin, A. Cetoniini. Voy. Babault Afrique or. angl. Paris **1921** pp. 1–44 3 pls. [Col.]

271.—Bourgoin, A. Diagnoses préliminaires de Buprestides nouveaux de l'Indochine française (Col.). Bull. Soc. ent. France Paris **1923** 1924 pp. 260–261 ; **1924** pp. 178–179.

272.—Bourgoin, A. Diagnoses préliminaires de Coléoptères nouveaux (Scarabaeidae et Buprestidae). Bull. Soc. ent. France, Paris **1924** pp. 137–138, 153–154.

273.—Bourgoin, A. *Meliboeus* de l'Indochine française voisins de *M. cupricollis* Saund. et de *M. chrysomelinus* Kerr. (Col., Buprestidae). Bull. Soc. ent. France Paris **1924** pp. 214–215.

274.—Boursin, C. Notes sur quelques Lépidoptères des Alpes-maritimes et des Basses-Alpes. Ann. Soc. ent. France Paris **92** (1923) 1924 pp. 311–322, 2 figs. 1 pl.

275.—Boursin, C. Note sur quelques Géomètres (Lep.) d'arrière- saison des Alpes-Maritimes. Bull. Soc. ent. France Paris **1924** pp. 24–25.

276.—Bouvier, E. L. Sur la nidification et les métamorphoses de quelques Saturniens hémilucides. C.R. Acad. Sci. Paris **179** 1924 pp. 858–861. [Lep.]

277.—Bouvier, E. L. Contribution à l'étude des saturniens. Ann. Sci. nat. (Zool.) Paris **7** 1924 pp. 137–178 19 figs. [Lep.]

278.—Bouvier, E. L. La mémoire chez les insectes. Scientia Bologna (2) **35** 1924 pp. 103–116.

279.—Böving, A. G. The historical development of the term "triungulin." J. Washington Acad. Sci. **14** 1924 pp. 203–204.

Böving, A. G. *see* Parker & Böving.

280.—Bowen, R. H. Studies on insect spermatogenesis. VI. Notes on the formation of the sperm in Coleoptera and Aptera, with a general discussion of flagellate sperms. J. Morph. Philadelphia **39** 1924 pp. 351–413, 4 pls. 2 figs.

281.—Bradley, W. H. Fossil caddice fly cases from the Green River formation of Wyoming. Amer. J. Sci. New Haven, Conn. **7** 1924 pp. 310–312.

282.—Brain, C. K. Preliminary note on the adaptation of certain radio principles to Insect investigation work. Ann. Univ. Stellenbosch Cape Town **2** (**1** in error) Sect. A. No. 2 1924 pp. 45–47.

283.—Braun, A. F. The frenulum and its retinaculum in the Lepidoptera. Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 234–256 1 pl.

284.—Brauns, H. Eine neue *Caenophanomyia*-Art vom Kap. Arch. Natg. Berlin Abt. A. **90** 1924 Heft 1 p. 28. [Dipt.]

285.—Brecher, L. Die Puppenfärbungen des Kohlweisslings, *Pieris brassicae* L. Achter Teil: Die Farbanpassung der Puppen durch das Raupenauge. Arch. mikr. Anat. Entwickl. Berlin **102** 1924 pp. 501–516 1 pl. 2 figs. [Lep.]

286.—Brecher, L. Die Puppenfärbungen der Vanessiden (*Vanessa io, V. urticae*). Arch. mikr. Anat. Entwickl. Berlin **102** 1924 pp. 517–548 1 fig. [Lep.]

287.—Brecher, L. Die Bedingungen für Fühlerfüsse bei *Dixippus* (*Carausius*) *morosus* Br. & Redt. (Homöosis bei Arthropoden, VII. Mitteilung.) Arch. mikr. Anat. Entwickl. Berlin **102** 1924 pp. 549–572 10 figs. [Orth.]

288.—Brelje, R. v. d. Die Anhangsorgane des weiblichen Geschlectsganges der Stechmucken (Culicidae). Zool. Anz. Leipzig **61** 1924 pp. 73–80 9 figs. [Dipt.]

289.—Brèthes, J. El bicho de cesto (*Oecticus kirbyi* var. *platensis* Berg). Campaña 1920–1921. Dos nuevos parásitos. Inst. biol. Soc. rural Argentina Buenos Aires **1922** 28 pp. [Lep., Hym., Dipt.]

290.—Brèthes, J. Varios himenópteros de la America de Sud. Nunquam Otiosus ii [Buenos Aires] **1924** pp. 6–16.

291.—Brèthes, J. Sur une collection de Coccinellides (et un Phalacridae) du British Muséum. An. Mus. Nac. Hist. nat. Buenos Aires **33** 1924 pp. 145–175 15 figs. [Col.]

292.—Brèthes, J. Description d'une galle de *Calliandra bicolor* et de l'Hymenoptère qui la produit. Rev. Facultad Agronomia La Plata **15** 1924 Reprint 6 pp. 2 figs.

293.—Bretschneider, Fr. Über das Gehirn eines Bärenspinners (*Callimorpha dominula*, die Jungfer). Jenaische Zs. Natw. **60** 1924 pp. 147–173 9 figs. [Lep.]

294.—Bretschneider, F. Über die Gehirne des Eichenspinners und des Seidenspinners (*Lasiocampa quercus* L. und *Bombyx mori* L.). Jenaische Zs. Natw. **60** 1924 pp. 563–578 10 figs.

295.—Breuning, S. Beiträge zur Kenntnis der Caraben der Ostalpen. Koleopt. Rundsch. Vienna **11** 1924 pp. 1–20 1 map. [Col.]

296.—Brimley, C. S. Three supposed new species of *Ceraturgus* (Diptera, Asilidae) from North Carolina. Ent. News Philadelphia **35** 1924 pp. 8–12.

297.—Bristowe, W. S. A bee-eating dragonfly, and a spider-eating Asilid fly. Ent. Mo. Mag. London **60** 1924 pp. 150–151.

298.—Britten, H. Records of Diptera in Lancashire and Cheshire identified during 1922. Lancs. Ches. Nat. **17** 1924 pp. 22–28.

299.—Brocher, F. Sur la nymphe du grand Hydrophile (*Hydrous piceus*). Ann. Biol. lacustre Brussels **13** 1924 pp. 77–81 5 figs. [Col.]

300.—Bromley, S. W. A new *Ophiogomphus* (Aeschnidae : Odonata) from Massachusetts. Ent. News Philadelphia **35** 1924 pp. 343–344 1 pl.

Bromley, S. W. *see* Shannon & Bromley.

301.—Brown, J. M. Yorkshire Hemiptera in 1923. Naturalist London **1924** pp. 124–126.

302.—Brown, J. M. A contribution to our knowledge of the life-history of *Heterocordylus genistae* Scop. Ent. Mo. Mag. London **60** 1924 pp. 249–251. [Hem.]

303.—Brownlee, J. The similarity of age vitality in invertebrates and man based on Professor Raymond Pearl's data. Amer. Nat. New York **58** 1924 pp. 558–564 4 tables.

304.—Bruch, C. Dos nuevos coleópteros mirmecófilos. Physis Buenos Aires **7** 1924 pp. 227–231 3 figs.

305.—Bruch, C. Descripción de la reina *Eciton* (*Acamatus*) *hetschkoi* Mayr. Physis Buenos Aires **7** 1924 pp. 232–235 3 figs. 2 plates. [Hym.]

306.—Bruch, C. Un nuevo estafilinido ecitonófilo. Physis Buenos Aires **7** 1924 pp. 256–260 2 figs. [Col.]

307.—Bruch, C. Una nueva ponerina *Acanthostichus ramosmexiae* n. spec. Physis Buenos Aires **7** 1924 pp. 260–261 1 fig. [Hym.]

308.—Brues, C. T. The specificity of food-plants in the evolution of phytophagous insects. Amer. Nat. New York **58** 1924 pp. 127–144.

309.—Brues, C. T. Triungulin larvae from the Williams Galapagos Expedition. Zoologica New York, **5** 1924 pp. 125–136 5 figs. [Col.]

310.—Brues, C. T. Notes on some New England Phoridae (Diptera). Psyche Boston **31** 1924 pp. 41–44 1 fig.

311.—Brues, C. T. Notes on Phoridae from South Africa. Psyche Boston **31** 1924 pp. 87–91 1 fig. [Dipt.]

312.—Brues, C. T. Another "Snow" Phorid (Diptera). Psyche Boston **31** 1924 p. 92.

313.—Brues, C. T. New and unrecorded American species of the family Phoridae (Diptera). Psyche Boston **31** 1924 pp. 155–161.

314.—Brues, C. T. Additions to the Phoridae of Formosa (Diptera). Psyche Boston **31** 1924 pp. 206–223.

315.—Brues, C. T. The identity of *Leptofoenus* F. Smith and *Pelecinella* Westwood (Hymenoptera). Psyche Boston **31** 1924 pp. 302–304.

316.—Brues, C. T. Some South African parasitic Hymenoptera of the families Evaniidae, Braconidae, Alysiidae, and Plumariidae in the South African Museum with a catalogue of the known species. Ann. S. Afr. Mus. Cape Town **19** 1924 pp. 1–150.

317.—Brug, S. L. De voornaamste Ned. Indische culicinen. Vereen. Bevord. Geneesk. Wetenschappen Ned. Indië Batavia **1924** 53 pp. [Dipt.]

318.—Brug, S. L. Notes on Dutch-East-Indian Mosquitos. Bull. Ent. Res. London **14** 1924 pp. 433–442 8 figs. [Dipt.]

319.—Brug, S. L. & **Haga,** J. Aantekening omtrent muskieten. Geneesk. Tijdschr. Ned.-Indië Batavia **63** 1923 pp. 635–640. [Dipt.]

320.—Brun, R. Ueber die Gesichtsorientierung der Insekten, speziell der Ameisen und Bienen. Mit. schweiz. ent. Ges. Bern **13** 1924 pp. 359–364. [Hym.]

321.—Bruner, S. C. Una nueva especie de la familia Enicocephalidae (Hemiptera). Mem. Soc. cubana Hist. nat. "Felipe Poey" Havana **6** 1924 pp. 53–59 1 pl.

322.—Bruner, S. C. A new *Enicocephalus* (Hemiptera-Heteroptera). Bull. Brooklyn Ent. Soc. **19** 1924 p. 39.

Bruner, S. C. *see* Fracker & Bruner.

323.—Brunetti, E. Nouvelles espèces de Stratiomyidae de l'Indo-Chine recueillies par M. R. Vitalis de Salvaza. Encyc. Ent. Ser. B. **2** Dipt. **1** Paris Lechevalier 1924 pp. 67–71 6 figs.

324.—Brunetti, E. Diptera of the Siju Cave, Garo Hills, Assam. I. Tipulidae, Tabanidae, Anthomyidae, Acalyptrate Muscidae and Phoridae. Rec. Ind. Mus. Calcutta **26** 1924 pp. 99–106.

325.—Brunetti, E. *Microdon apiformis* Brun., renamed. Rec. Ind. Mus. Calcutta **26** 1924 p. 153. [Dipt.]

326.—Bryant, G. E. New species of Phytophaga. Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 299–304; **14** 1924 pp. 247–252. [Col.]

327.—Bryk, F. Ueber die Disphragophorie der Schmetterlingsweibchen. Soc. ent. Stuttgart **39** 1924 pp. 45–47 4 figs. [Lep.]

328.—Buchanan, L. L. On the systematic position of the Carabid *Stereocerus haematopus* Dej. (*similis* Kby.) (Coleoptera). Canad. Ent., Orillia **56** 1924 pp. 40–42.

329.—Buchner, P. System und Symbiose (Untersuchungen an Zikaden). Verh. D. zool. Ges. Berlin **29** 1924 pp. 48–54. [Hom.]

330.—Buckell, E. R. Additions and corrections to the list of British Columbia Orthoptera. Proc. Br. Columbia Ent. Soc., Vancouver **21** 1924 pp. 7–12.

331.—Buckle, P. On the ecology of soil insects on agricultural land. J. Ecology Cambridge **11** 1923 pp. 93–102 1 text-fig.

Buckle, P. *see* Wardle & Buckle.

332.—Bugnion, E. Le sac infra-buccal et le pharynx des Fourmis. C.R. Soc. Biol. Paris **91** 1924 pp. 998–1000 3 pls. [Hym.]

333.—Bugnion, E. La fourmi fileuse de Ceylan (*Oecophylla smaragdina* F., sous-fam. Camponotinae For.). Riviera scient. Nice **10** 1923 pp. 19–32 3 figs. [Hym.]

334.—Bugnion, E. Les organes buccaux de la Scolie. IIme partie. Etude complémentaire. (*Scolia bidens* Linn., *flavifrons* Fab., *Dielis ciliata* Fab.). Mit. schweiz. ent. Ges. Bern **13** 1924 pp. 368–396 13 figs. [Hym.]

335.—Bugnion, E. & **du Buysson,** H. Le *Platypsyllus castoris* Rits. Ann. Aci. nat. Zool. Paris **7** 1924 pp. 83–130 21 figs. [Col.]

336.—du Buisson, —. Observations sur la ventilation trachéenne des Insectes. Première note.—La ventilation trachéenne chez un Acridien. Bul. Acad. roy. Brussels (5) **10** 1924 pp. 373–391 6 figs.

337.—Buresch, I. Notizen über die Rhopalocerenfauna Bulgariens. Trav. Soc. bulgar. Sci. nat. Sofia **5** 1912 pp. 20–56. [Lep.] [In Bulgarian; summary in German.]

338.—Buresch, I. Noitzen über die Fauna der Nachtschmetterlingen Bulgariens. [Lep.] *Op. cit.* **6** 1914 pp. 39–98 [In Bulgarian.]

339.—Buresch, I. Die Nachtschmetterlinge Bulgariens mit besonderer Berücksichtigung der schädlichen Arten. *Op. cit.* **7** 1915 pp. 11–100 [Lep.] [In Bulgarian; summary in German].

340.—Buresch, I. Der Trauben wickler (*Polychrosis botrana*) seine Biologie und Bekämpfung. *Op. cit.* **10** 1923 pp. 147–176 figs [Lep.] [In Bulgarian.]

341.—Buresch, I. Die Hohlenfauna Bulgariens. *Op. cit.* **11** 1924 pp. 143–163 figs. [Col.]

342.—Buresch, I. & **Iltcheff,** D. Zweiter Beitrag zur Erforschung der Lepidopterenfauna von Trazien, Mazedonien und Nachborländern. Trav. Soc. bulgar. Sci. nat. Sofia **8** 1915 pp. 151–197. [In Bulgarian; summary in German.]

343.—Buresch, I. & **Iltcheff,** D. Dritter Beitrag zur Erforschung der Lepidopterenfauna von Trazien und Mazedonien. Trav. Soc. bulgar. Sci. nat. Sofia **9** 1921 pp. 61–86. [In Bulgarian.]

344.—Burgeon, L. Liste des Cétoines du Congo Belge appartenant au Musée de Tervueren. Ann. Soc. ent. Belg. Brussels **64** 1924 pp. 109–129. [Col.]

345.—Burgeon, L. Quelques observations sur les *Dorylus* au Congo Belge. Rev. zool. afr. Brussels **12** 1924 pp. 429–436. [Hym.]

346.—Burke, H. E. Notes on the genus *Buprestis* with description of one new species (Coleoptera, Buprestidae). Proc. Ent. Soc. Washington **26** 1924 pp. 70–72.

347.—Burns, A. N. & **Thorn,** L. B. Butterfly collecting in Northern New South Wales and Southern Queensland. Vict. Nat. Melbourne **40** 1924 pp. 221–230. [Lep.]

348.—Burrows, C. R. N. Upon the suggested relationships of Psychides. Ent. Rec. London **36** 1924 pp. 81–85 97–99 2 pls. [Lep.]

349.—Butler, E. A. The problem of *Notostira* (Hemiptera). Ent. Mo. Mag. London **60** 1924 pp. 49–52.

350.—Butler, E. A. Notes on the early stages of British Heteroptera. Ent. Mo. Mag. London **60** 1924 pp. 265–268.

351.—Buxton, P. A. Heat, moisture and animal life in deserts. Proc. R. Soc. London (B) **96** 1924 pp. 123–131.

352.—Buxton, P. A. Physical factors controlling harvesting in an ant. Trans. Ent. Soc. London **1923** 1924 pp. 538–543. [Hym.]

353.—Buxton, P. A. Habits of some Tenebrionid beetles. Ent. Mo. Mag. London **60** 1914 pp. 3–7.

354.—Buxton, P. A. A key to the fourth stage *Anopheles* larvae of Palestine (Dipt.). Bull. Soc. R. ent. Egypte Cairo **1923** 1924 pp. 45–51 6 figs.

355.—Buxton, P. A. & **Uvarov,** B. P. A contribution to our knowledge of the Orthoptera of Palestine. Bull. Soc. R. ent. Egypte Cairo **1923** 1924 pp. 167–214 5 figs.

356.—Buys, K. S. Adipose tissue in insects. J. Morph. Philadelphia **38** 1924 pp. 485–528 8 pls.

357.—de Buysson, H. *Chrysomela menthastri* Suffr. Varietates novae. Misc. ent. Castanet-Tolosan **27** 1924 p. 89. [Col.]

du Buysson, H. *see* Bugnion & du Buysson.

358.—Bynum, E. K. & **Holloway,** T. E. The new pink borer of sugarcane and corn (Lepidoptera, Noctuidae). Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 469–472 1 fig.

359.—Cabeau, C. Aberrations de Lépidoptères. Rev. mens. Soc. ent. Namur **24** 1924 pp. 17–18 25 34–35 50 66–67.

360.—Caillol, H. Catalogue des Coléoptères de Provence. Pt. I. Cicindelidae, Carabidae, Haliplidae, Hygrobiidae, Dytiscidae, Gyrinidae, Staphylinidae, Pselaphidae, Claviger-idae, Scydmaenidae. Pp. 520, 1908. Part II. Silphidae, Liodidae, Corylophidae, Trichopterygidae, Hydroscaphidae, Histeridae, Nitidulidae, Cucujidae . . . Scarabaeidae, Buprestidae, Elateridae. Pp. 608 1913–1914. Soc. linn. Provence Marseilles.

361.—Caland, M. *Dianthoecia*-rupsen. Ent. Ber. The Hague **6** 1924 pp. 315–317. [Lep.]

362.—Calvert, P. P. The generic characters and the species of *Philogenia* Selys (Odonata : Agrionidae). Trans. Amer. Ent. Soc. Philadelphia **50** 1924 pp. 1–56 5 pls. 20 figs.

363.—Calvert, P. P. The supposed male of *Ophiogomphus howei* Bromley (Odon. : Aeschnidae). Ent. News Philadelphia **35** 1924 pp. 345–347 1 pl.

364.—Cameron, M. New species of Staphylinidae from India. Trans. Ent. Soc. London **1924** pp. 160–198. [Col.]

365.—Cameron, M. Coleoptera from the Siju Cave, Garo Hills, Assam. II. New species of Staphylinidae. Rec. Ind. Mus. Calcutta **26** 1924 pp. 118–119.

366.—Campion, H. Notes on two species of *Pseudophaea* (Odonata). Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 173–176.

367.—Campion, H. Descriptions of two new species of *Teinobasis* (Odonata). Ann. Mag. Nat. Hist. London (9) **14** pp. 612–614 2 figs.

368.—de Campos Novaes, J. Um broqueador do caffeeiro, *Xyleborus cofeicola* n. sp. (Fam. Ipidae). Bol. Agric. S. Paulo **23** 1922 pp. 67–70 4 figs. [Col.]

369.—Candéze, L. Contribution à la faune des Lépidoptères Hétérocères de Belgique. Bull. Soc. ent. Belg. Brussels **6** 1924 pp. 42–46.

370.—Capra, F. Nota sul genere *Aclemmysa* (Col., Endom.). Boll. Soc. ent. ital. Genoa **56** 1924 pp. 138–141 1 fig.

371.—Carpenter, G. D. H. *Pseudacraea eurytus* and its models in Eastern Uganda. Trans. Ent. Soc. London **1923** 1924 pp. 469–491 2 pls. [Lep.]

372.—Carpenter, G. H. Insects; their structure and life. A primer of Entomology. London and Toronto, J. M. Dent & Sons, Ltd. 2nd Edn. 1924 xi + 335 pp. 4 pls. 184 figs.

373.—Carpenter, G. H. Warble-flies of cattle. Mem. Proc. Manchester Lit. Phil. Soc. **68** 1923–4 pp. vii–viii. [Dipt.]

374.—Carpenter, G. H. Collembola of the Siju Cave, Garo Hills, Assam. Rec. Ind. Mus. Calcutta **25** 1924 pp. 285–289 10 figs.

375.—Carpentier, F. Sur le double stigmate de quelques Orthoptères. Bull. Soc. ent. Belg. Brussels **6** 1924 pp. 123–140 11 figs.

376.—Carr, J. W. The Diptera pollinating the flowers of *Aristolochia sipho.* Ent. Mo. Mag. London **60** 1924 p. 258.

377.—Carr, L. A. The Ichneumonidae of the Lichfield district, Staffordshire. Trans. N. Staffs. F. Cl. Stafford **58** 1924 Appdx. pp. 1–70.

378.—Carter, H. J. Australian Coleoptera. Notes and new species, No. iii. Proc. Linn. Soc. N.S. Wales Sydney **49** 1924 pp. 19–45 10 figs.

379.—Carter, W. A new species of *Psammophila* Dahlbom and the allotype of *Psammophila valida* Cresson (Hymen.). Ent. News Philadelphia **35** 1924 pp. 365–367.

Carter, W. *see* Harrison & Carter.

380.—Casey, T. L. Additions to the known Coleoptera of North America. Memoirs on the Coleoptera, Lancaster Pa. **11** 1924 pp. 1–347.

381.—Cassino, S. E. & **Swett,** L. W. Some new Eupithecias. Lepidopterist Salem Mass. **4** 1924 pp. 25–28.

382.—Cassino, S. E. & **Swett,** L. W. Some new *Coenocharis.* Lepidopterist Salem Mass. **4** 1924 pp. 30–32 3 figs.

383.—Castle-Russell, S. G. Seasonal notes on the Rhopalocera. Ent. Rec. London **36** 1924 pp. 165–167. [Lep.]

384.—Caudell, A. N. Report on Orthoptera and Dermaptera collected by the Barbados-Antigua Expedition from the University of Iowa in 1918. Univ. Iowa Studies Nat. Hist. **10** no. 1 1922 pp. 19–44 2 figs.

385.—Caudell, A. N. Notes on *Grylloblatta* with description of a new species. J. Washington Acad. Sci. **14** 1924 pp. 369–371. [Orth.]

386.—Caudell, A. N. Some insects from the Chilibrillo bat caves of Panama. Insec. Inscit. Menstr. Washington **12** 1924 pp. 133–136.

387.—Caudell, A. N. Change of a preoccupied generic name. Proc. Ent. Soc. Washington **26** 1924 p. 92. [Orth.]

388.—Caudell, A. N. *Amblycorypha brachyptera* Ball (Orthoptera). Proc. Ent. Soc. Washington **26** 1924 p. 180.

389. Caudell, A. N. Two new species of *Ceuthophilus* from the Carlsbad cave in New Mexico (Orthoptera). Proc. Ent. Soc. Washington **26** 1924 pp. 217–221.

390.—Caudell, A. N. Malayan and East Indian Blattidae, I. Introduction and subfamily Panèsthinae. Philipp. J. Sci. Manila **24** 1924 pp. 641–666 1 pl. [Orth.]

391.—Caudell, A. N. & **King,** J. L. A new genus and species of the Notopterous family Grylloblattidae from Japan. Proc. Ent. Soc. Washington **26** 1924 pp. 53–60 1 pl. [Orth.]

392.—Cavazza, F. Studio sperimentale di alcuni casi di determinazione del sesso e di partenogenesi. Redia Florence **15** 1924 pp. 19–68. [Lep.]

393.—Ceballos, G. Notas sobre Ichneumónidos exóticos. IV. Una *Mansa* nueva de Camarones. Bol. R. Soc. esp. Hist. nat. Madrid **24** 1924 pp. 14–16 1 fig. [Hym.]

394.—Ceballos, G. Notas sobre Ichneumónidos exóticos. V. Un Mesostenino nuevo de Camarones. Bol. R. Soc. esp. Hist. nat. Madrid **24** 1924 pp. 62–64 2 figs. [Hym.]

395.—Ceballos, G. Estudios sobre Ichneumónidos de España. I. Subfamilia Joppinae (Tribus Joppini, Amblytelini, Listrodromini). Trab. Mus. Nac. Ciencias nat. Madrid **1924** 335 pp. 370 figs. [Hym.]

396.—Cecconi, G. Manuale di Entomologia forestale. Padua 1924 680 pp. 786 figs.

397.—Champion, G. C. Some Indian Coleoptera. Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 249–264 19 figs.

398.—Champion, G. C. Additional species of Xylophilidae from the Philippines, India, Fiji and S. and W. Africa. Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 481–498. [Col.]

399.—Champion, G. C. Coleoptera from the Seychelles: Lampyridae, Helodidae, Cantharidae, Melyridae and supplement to Cleridae. Trans. Ent. Soc. London **1923** 1924 pp. 295–304.

400.—Champion, G. C. On a new subfamily of Clavicorn Coleoptera. Ent. Mo. Mag. London **60** 1924 pp. 25–29 20 figs.

401.—Champion, G. C. Notes on the apple *Anthonomi.* Ent. Mo. Mag. London **60** 1924 pp. 74–76. [Col.]

402.—Champion, G. C. Some Indian Coleoptera. Ent. Mo. Mag. London **60** 1924 pp. 156–172 2 figs. pp. 234–247.

Chandler, S. C. *see* Flint, Chandler & Glenn.

403.—Chang, H. S. A preliminary list of the Acrididae of China. China J. Sci. and Arts Shanghai **2** 1924 pp. 64–70. [Orth.]

404.—Chapin, E. A. Classification of the Philippine components of the Coleopterous family Cleridae. Philipp. J. Sci. Manila **25** 1924 pp. 159–286 5 pls.

405.—Chatterjee, S. N. Catalogue of Indian Insects. Part 5. Nitidulidae. Calcutta, Govt. India Central Pubn. Br. 1924 40 pp. [Col.]

406.—Cheetham, C. A. Diptera notes and additions. Naturalist London 1924 pp. 84–85 332.

407.—Cheetham, C. A. Yorkshire Tipulids. Naturalist London 1924 pp. 327–328. [Dipt.]

408.—Ch'en, T. Y. The genetics of two mutations in the fruit-fly *Drosophila melanogaster.* China J. Sci. and Arts Shanghai **2** 1924 pp. 143–157 6 figs. [Dipt.]

409.—China, W. E. A new genus of Myodochidae (Lygaeidae) (Heteroptera). Entomologist London **57** 1924 pp. 82–83.

410.—China, W. E. Notes on Jassoidea (Homoptera). Entomologist London **57** 1924 pp. 144 216.

411.—China, W. E. A new genus of Peloridiidae (Hemiptera) from Tasmania. Ent. Mo. Mag. London **60** 1924 pp. 199–203.

412.—China, W. E. The Hemiptera-Heteroptera of Rodriguez together with the description of a new species of Cicada from that Island. Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 427–453 4 figs.

413.—China, W. E. A new genus of Bythoscopinae (Jassidae, Homoptera) from West Australia. Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 529–531 3 figs.

414.—China, W. E. A preliminary revision of the Oriental species of *Leptocorisa*, Latr. (Hemiptera, Coreidae). Bull. Ent. Res. London **14** 1924 pp. 235–239 1 fig.

415.—China, W. E. Description of a new species of Reduviid. Rec. Ind. Mus. Calcutta **26** 1924 pp. 96–97. [Heteropt.]

416.—Chittenden, F. H. The Amaranth Curculio *Conotrachelus seniculus* Lec. J. New York Ent. Soc. **32** 1924 pp. 119–121. [Col.]

417.—Chittenden, F. H. New species and varieties of *Sphenophorus* with notes on certain other forms. Proc. Ent. Soc. Washington **26** 1924 pp. 145–159 2 pls. [Col.]

418.—Chobaut, A. Une aberration nouvelle de *Mylabris brunnipes* Klug (Col. Meloidae). Bull. Soc. ent. France Paris **1923** 1924 pp. 259–260 1 fig.

419.—Chobaut, A. Une variété française de *Lasioderma semirufulum*, Reitt. (Col. Anobiidae). Bull. Soc. ent. France Paris **1924** p. 103.

420.—Chobaut, A. Description d'un Opatride (Col. Tenebrionidae) nouveau de l'Afrique du Nord. Bull. Soc. ent. France Paris **1924** pp. 154–156.

421.—Chobaut, A. Description d'un *Cyphostethe* (Col., Tenebrionidae) nouveau de l'Algérie méridionale. Bull. Soc. ent. France Paris **1924** pp. 166–167.

422.—Chobaut, A. Tableau synoptique des *Stenalia* paléarctiques à élytres maculés de jaune (Col. Mordellidae). Bull. Soc. ent. France Paris **1924** pp. 179–183 15 figs.

423.—Chobaut, A. Deux espèces nouvelles de *Thorictus* (Col., Thoricidae) de Tunisie. Bull. Soc. ent. France Paris **1924** pp. 215–217 2 figs.

424.—Chobaut, A. Description d'un *Allophylax* (Col., Tenebrionidae) nouveau de Tunisie. Bull. Soc. ent. France Paris **1924** pp. 219–220.

425.—Chobaut, A. Description d'un *Anthicus* nouveau du Maroc. Bull. Soc. Sci. nat. Maroc Rabat **4** 1924 p. 104. [Col.]

426.—Chobaut, A. Quatre espèces nouvelles de *Thorictus* (Col., Thoricidae) du Maroc. Bull. Soc. Sci. nat. Maroc Rabat **4** 1924 pp. 105–107 4 figs.

427.—Cholodkovsky, N. Contributions à la connaissance du réceptacle séminal des Lépidoptères. Rev. zool. russe Moscow **2** 1918 pp. 173–182 10 figs. [Also in Russian.]

428.—Chopard, L. Orthoptères. Voy. Babault Afrique or. angl. Paris **1921** pp. 1–61 2 pls. 31 figs.

429.—Chopard, L. Orthoptères et Dermaptères. Faune de France **3** Paris Lechevalier 1922 212 pp. 466 figs.

430.—Chopard, L. Recherches sur la conformation et le developpement des derniers segments abdominaux chez les Orthoptères [contd. from 1920]. Insecta Rennes **11** (1921) 1922 pp. 113–224 sep. pag.; **12** (1922) 1923 pp. 225–352 7 pls. 14 figs.

431.—Chopard, L. Note rectificative sur deux Acridiens de Corse (Orth.). Ann. Soc. ent. France Paris **92** (1923) 1924 p. 310.

432.—Chopard, L. Note sur quelques Orthoptères cavernicoles de Sumatra et de Java. Ann. Soc. ent. France Paris **93** 1924 pp. 189–192.

433.—Chopard, L. Description d'un Blattide myrmecophile nouveau (Orth.). Bull. Soc. ent. France Paris **1924** pp. 131–132 & 186 1 fig.

434.—Chopard, L. Description d'un *Nicoletia* de Corse (Thys., Lepismidae). Bull. Soc. ent. France Paris **1924** pp. 174–176 7 figs.

435.—Chopard, L. On some cavernicolous Orthoptera and Dermaptera from Assam and Burma. Rec. Ind. Mus. Calcutta **26** 1924 pp. 81–92 2 pls.

436.—Chopard, L. The Dermaptera and Orthoptera of Barkuda Island. Rec. Ind. Mus. Calcutta **26** 1924 pp. 165–191 38 figs.

437.—Chopra, B. The larva of an Indian Carabid beetle. Rec. Ind. Mus. Calcutta **26** 1924 pp. 145–151 6 figs. [Col.]

438.—Christophers, S. R. Some Himalayan and Peninsular varieties of Indian species of *Anopheles.* Ind. J. Med. Res. Calcutta **12** 1924 pp. 11–13. [Dipt.]

439.—Christophers, S. R. Some further varieties of Indian species of *Anopheles* with notes on the species *A. pallidus* Theobald and *A. philippinensis* Ludlow. Ind. J. Med. Res. Calcutta **12** 1924 pp. 295–301. [Dipt.]

440.—Claassen, P. W. New species of North American Capniidae (Plecoptera). Canad. Ent. Orillia **56** 1924 pp. 43–48 54–57.

441.—Clark, J. Australian Formicidae. J. R. Soc. W. Australia Perth **10** 1924 pp. 75–89 2 pls. [Hym.]

Clausen, C. P. *see* Timberlake & Clausen.

442.—Clausen, R. E. The inheritance of cinnabar eye-color in *Drosophila melanogaster* including data on the locus of Jaunty. J. Exp. Zool. Philadelphia **38** 1924 pp. 423–436. [Dipt.]

Clayhills, T. H. *see* Grönblom & Clayhills.

443.—Cleare, Jr., L. D. Insect Camouflage. J. Bd. Agric. Br. Guiana Georgetown **17** 1924 pp. 163–175.

444.—Clemens, W. A. & **Leonard,** A. K. On two species of Mayflies of the genus *Heptagenia.* Canad. Ent. Orillia **56** 1924 pp. 17–18. [Ephem.]

445.—Clément, E. Opuscula Hymenopterologica, I. Die Ophionien-Gattungen *Pyracmon* Hlgr. und *Rhimphoctona* Först. (Ichneumonidae, Ophioninae.) D. ent. Zs. Berlin **1924** pp. 105–133.

446.—Clench, W. J. Observations on the ovipositing of *Tetraopes tetrophthalmus* Forst. Papers Michigan Acad. Sci. Arts and Letters New York **3** 1924 pp. 367–368. [Col.]

447.—Clutterbuck, C. G. Lepidoptera in Gloucestershire in 1921 and 1922. Entomologist London **57** 1924 pp. 57–62 1 fig.

448.—Cockayne, E. A. The distribution of fluorescent pigments in Lepidoptera. Trans. Ent. Soc. London **1924** pp. 1–19.

449.—Cockayne, E. A. The Rainham "Hybrids." Ent. Rec. London **36** 1924 pp. 6–8. [Lep.]

450.—Cockayne, E. A. A somatic mosaic or mutation in *Abraxas grossulariata.* Ent. Rec. London **36** 1924 pp. 17–20 1 pl. [Lep.]

451.—Cockayne, E. A. Teratological legs in Lepidoptera. Ent. Rec. London **36** 1924 pp. 33–36 1 pl.

452.—Cockayne, E. A. Yellow eggs in *Lycia hirtaria.* Ent. Rec. London **36** 1924 pp. 149–150. [Lep.]

453.—Cockayne, E. A. Notes on collecting in 1923. London Naturalist **1923** 1924 pp. 33–35. [Lep.]

454.—Cockerell, T. D. A. Notes on the structure of Bees. Proc. Ent. Soc. Washington **26** 1924 pp. 77–85. [Hym.]

455.—Cockerell, T. D. A. Expedition of the California Academy of Sciences to the Gulf of California in 1921. The Bees, ii. Proc. Cal. Acad. Sci. San Francisco (4) **12** 1924 pp. 529–560 4 figs. [Hym.]

456.—Cockerell, T. D. A. The name of the lac insects. Psyche Boston **31** 1924 pp. 47–48. [Hom.]

457.—Cockerell, T. D. A. A new bee from Oregon. Psyche Boston **31** 1924 pp. 243–244. [Hym.]

458.—Cockerell, T. D. A. A new genus of bees from California (Hymen.). Ent. News Philadelphia **35** 1924 pp. 169–171.

459.—Cockerell, T. D. A. A bee collecting trip to Chimney Rock, Wyoming. Ent. News Philadelphia **35** 1924 pp. 347–351. [Hym.]

460.—Cockerell, T. D. A. Anthophorid bees in the collection of the California Academy of Sciences. Pan-Pacific Ent. S. Francisco **1** 1924 pp. 49–56. [Hym.]

461.—Cockerell, T. D. A. Bees of the genus *Andrena* in the collection of the California Academy of Sciences. Pan-Pacific Ent. S. Francisco **1** 1924 pp. 57–65. [Hym.]

462.—Cockerell, T. D. A. New Anthophorid bees from Arizona and Wyoming. Amer. Mus. Novit. New York no. **113** 1924 pp. 1–3.

463.—Cockerell, T. D. A. Bees from the Tonga and Samoa Islands. Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 392–394. [Hym.]

464.—Cockerell, T. D. A. Descriptions and records of bees. xcix–ciii. Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 523–530, 594–606; **14** 1924 pp. 179–185, 274–283, 577–585.

465.—Cockerell, T. D. A. Fossil Ichneumons believed to have been parasitic on sawflies. Entomologist London **57** 1924 pp. 9–10. [Hym.]

466.—Cockerell, T. D. A. An ancestor of the Agromyzidae. Entomologist London **57** 1924 pp. 199–201. [Dipt.]

467.—Cockerell, T. D. A. & **Harris,** R. C. A new form of *Rhynchites* (Coleop.: Curculionidae). Ent. News Philadelphia **35** 1924 p. 144.

468.—Cockerell, T. D. A. & **Sandhouse,** G. Parasitic bees (Epeolinae and Melectinae) in the collection of the California Academy of Sciences. Proc. Cal. Acad. Sci. San Francisco (4) **13** 1924 pp. 305–324. [Hym.]

Cockerell, T. D. A. *see* Sandhouse & Cockerell.

469.—Cole, F. R. Notes on Diptera of the Syrphid genus *Sphegina*. Ent. News Philadelphia **35** 1924 pp. 39–44 1 pl.

470.—Cole, F. R. Notes on the Dipterous Family Asilidae, with descriptions of new species. Pan-Pacific Ent. S. Francisco **1** 1924 pp. 7–13 6 figs.

471.—Cole, F. R., **Malloch,** J. R. & **McAtee,** W. L. District of Columbia Diptera: Tromoptera (Cyrtidae, Bombyliidae, Therevidae, Scenopinidae). Proc. Ent. Soc. Washington **26** 1924 pp. 181–195.

472.—Colledge, W. R. An interesting insect larva. Queensl. Nat. Brisbane **4** 1923 pp. 39–40 2 figs. [Col.]

473.—Collin, J. E. Diptera (Cyclorrhapha) from Spitsbergen. Results of the Merton College Expedition to Spitsbergen, 1923.—No. 5. Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 201–203.

474.—Collin, J. E. On the Diptera (other than Nematocera) of Jan Mayen Island. Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 204–206.

475.—Cook, W. C. Climatic variations and moth flight at Bozeman. Canad. Ent. Orillia **56** 1924 pp. 229–234. [Lep.]

476.—Cooke, B. H. Butterflies of Austria and Hungary. Entomologist London **57** 1924 pp. 74–78, 133–139.

477.—Cooke, B. H. Lepidoptera on the coast of Brittany. Entomologist London **57** 1924 pp. 203–205, 220–225.

478.—Coolidge, K. R. The life-history of *Brephidium exilis*, Bdv. (Lepid.: Lycaenidae). Ent. News Philadelphia **35** 1924 pp. 115–121.

479.—Coolidge, K. R. The life-history of *Mitoura loki* Skinner (Lepid.: Lycaenidae). Ent. News Philadelphia **35** 1924 pp. 199–204.

480.—Coolidge, K. R. Life history of *Heodes helloides* Bdv. (Lepid., Lycaenidae). Ent. News Philadelphia **35** 1924 pp. 306–312.

481.—Coolidge, K. R. California Butterfly Notes.—II, Bull. Brooklyn Ent. Soc. **19** 1924 pp. 44–47. [Lep.]

482.—Coolidge, K. R. Life history studies of some Californian Rhopalocera (Lepidoptera). Trans. Amer. Ent. Soc. Philadelphia **50** 1924 pp. 319–335.

483.—Cooling, L. E. Seven common species of mosquitoes described for purposes of identification. Australia Dept. Health Serv. Pubn. (Trop. Div.) Melbourne no. **1** [1924] 24 pp. 3 figs. [Dipt.]

484.—Cooling, L. E. A synonymic list of the more important species of Culicidae of the Australian Region. Australia Dept. Health Serv. Pubn. (Trop. Div.) Melbourne no. **2** [1924] 61 pp. [Dipt.]

485.—Cooling, L. E. The larval stages and biology of the commoner species of Australian mosquitoes with the biology of *Aëdes pecuniosus* Edwards. Australia Dept. Health Serv. Pubn. (Trop. Div.) Melbourne no. **8** [1924] 40 pp. 15 figs.

486.—Coquillett, D. W. A new genus and species of Trypetidae infesting asparagus in South Africa (Diptera). Proc. Ent. Soc. Washington **26** 1924 pp. 64–66.

487.—Cornetz, V. Les insectes paralyseurs. La Nature, Paris **1924** pp. 252–254. [Hym.]

488.—Corporaal, J. B. Notes systématiques et synonymiques sur les Clérides. (2me communication sur les Clérides.) Tijdschr. Ent. The Hague **67** 1924 pp. 195–196.

490.—Corti, A. Studien über die Gattung *Agrotis* O. (Lep.). I. Ueber Kataplexie bei *Agrotis*-Arten. Soc. ent. Stuttgart **39** 1924 pp. 5–6.

491.—Corti, A. Studien über die Gattung *Agrotis* O. (Lep.) II–III. Schweiz. ent. Anz. Zürich **3** 1924 pp. 20–22 4 figs; 41–42, 45–47, 49–51 4 figs.

Cotie, J. *see* Tian & Cotie.

493.—Cotte, J. Les Cécidies des Alpes Maritimes. Mém. Soc. Linn. Provence Marseilles **3** 1924 56 pp. 6 pls.

494.—Cotton, R. T. The identity of *Sitophilus* (*Calandra*) *rugicollis* Casey (Coleop.). Proc. Ent. Soc. Washington **26** 1924 p. 141.

495.—Cotton, R. T. The Cambium Curculio, *Conotrachelus anaglypticus*, Say. J. Agric. Res. Washington **28** 1924 pp. 377–386 2 pls. 2 figs. [Col.]

496.—Cotton, R. T. A contribution toward the classification of the weevil larvae of subfamily Calendrinae occurring in North America. Proc. U. S. Nat. Mus. Washington **66** 1924 art. 5 pp. 1–11 10 pls. [Col.]

Craighead, F. C. *see* Swaine, Craighead & Bailey.

497.—Crampton, G. C. Notes on the relationships indicated by the mandibles of certain holometabolous insects. Bull. Brooklyn Ent. Soc. **19** 1924 pp. 157–163 1 pl.

498.—Crampton, G. C. Remarks on the phylogeny and interrelationships of Nematocerous Diptera. Psyche Boston **31** 1924 pp. 238–242 1 fig.

499.—Crampton, G. C. The phylogeny and classification of insects. J. Ent. & Zool. Claremont Cal. **16** 1924 pp. 33–47.

500.—Crawford, D. L. The Bishop Museum collection of Psyllidae (Homoptera). Proc. Hawaiian Ent. Soc. Honolulu **5** 1924 pp. 369–370.

501.—Crawford, D. L. New Indian Psyllidae. Rec. Ind. Mus. Calcutta **26** 1924 pp. 615–621 3 figs. [Hom.]

502.—Crawley, W. C. & **Jacobson,** E. Ants from Sumatra, with biological notes. Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 380–409 4 figs. [Hym.]

503.—Cresson, E. T., Jr. Descriptions of new genera and species of the Dipterous Family Ephydridae. Paper vi. Ent. News Philadelphia **35** 1924 pp. 159–164.

504.—Cresson, E. T., Jr. Studies in the Dipterous Family Ortalidae, with descriptions of new species mostly from North America. Trans. Amer. Ent. Soc. Philadelphia **50** 1924 pp. 225–241.

505.—Cresson, E. T. & **Rehn,** J. A. G. Entomological Literature. Ent. News Philadelphia **35** 1924 pp. 23–28, 71–76, 105–114, 145–152, 179–186, 218–221, 257–262, 294–301, 334–342, 374–379.

506.—Cretschmar, M. Die Entstehung der Gynandromorphen. Intern. ent. Zs. Guben **18** 1924 pp. 43–44, 54–56.

507.—Cretschmar, M. Einzelheiten über *Papilio machaon* L. Intern. ent. Zs. Guben **17** 1924 pp. 169–174. [Lep.]

508.—Criddle, N. Observations on the habits of *Sphex procera* in Manitoba. Canad. Field Nat. Ottawa **38** 1924 pp. 121–123. [Hym.]

509.—Criddle, N. Notes on the early stages of Grasshoppers. Canad. Ent. Orillia **56** 1924 pp. 49–53. [Orth.]

510.—Cros, A. *Pelania mauritanica* L. Variations-moeurs-évolution. Bull. Soc. Hist. nat. Afr. Nord Algiers **15** 1924 pp. 10–52. [Col.]

511.—Cros, A. *Cerocoma vahli* Fabricius. Moeurs—évolution. Bull. Soc. Hist. nat. Afr. Nord Algiers **15** 1924 pp. 262–292. [Col.]

512.—Cros, A. Contribution à l'étude des espèces du genre *Sitarobrachys* Reitter et plus spécialement du *S. buigasi* Escal. (Coléoptère, Meloidae). Bull. Soc. Sci. nat. Maroc Rabat **4** 1924 pp. 22–39 1 fig.

513.—Cros, A. Emission d'un spermatophore par divers coléoptères. Bull. Soc. Sci. nat. Maroc Rabat **4** 1924 pp. 98–103.

514.—Cros, A. Révision des espèces africaines et orientales des genres *Horia* Fabr. et *Cissites* Latr., avec description de larves inédites. Bull. Soc. R. ent. Egypte, Cairo **1924** pp. 24–80 2 figs. [Col.]

515.—Crozier, W. J. & Pilz, G. F. Central nervous excitation by alkaloids in insects. Amer. J. Physiol Baltimore **69** 1924 pp. 41–42.

516.—Csiki, E. Calosominarum species nova aethiopica. Folia ent. hungarica Budapest **1** 1924 p. 21. [Col.]

517.—Cunliffe, N. Further observations on the prevalence and habits of *Oscinella frit* Linn. Ann. App. Biol. Cambridge **11** 1924 pp. 54–72 3 charts. [Dipt.]

518.—Curran, C. H. Taxonomic and synonymic tendencies with especial reference to Diptera. 54th Ann. Rept. Ent. Soc. Ontario **1923** Toronto 1924 pp. 20–24.

519.—Curran, C. H. *Rhagoletis pomonella* and two allied species (Trypaneidae, Diptera). 54th Ann. Rept. Ent. Soc. Ontario **1923** Toronto 1924 pp. 56–57 2 figs.

520.—Curran, C. H. The generic position of *Beris viridis* Say (Stratiomyidae, Diptera). Canad. Ent. Orillia **56** 1924 p. 24.

521.—Curran, C. H. Synopsis of the genus *Chrysotoxum* with notes and descriptions of new species (Syrphidae, Diptera). Canad. Ent. Orillia **56** 1924 pp. 34–40.

522.—Curran, C. H. *Rhagoletis symphoricarpi*, a new Trypaneid from British Columbia (Dipt.). Canad. Ent. Orillia **56** 1924 pp. 62–63.

523.—Curran, C. H. A new species of *Nothosympycnus* (Dolichopodidae) with synopsis of Canadian species. Canad. Ent., Orillia **56** 1924 pp. 109–110. [Dipt.]

524.—Curran, C. H. Seven new species of *Rhaphium* (Dolichopodidae, Diptera). Canad. Ent. Orillia **56** 1924 pp. 133–141.

525.—Curran, C. H. New Canadian Diptera, with synopsis of the genus *Cynorhina*. Canad. Ent. Orillia **56** 1924 pp. 193–196.

526.—Curran, C. H. Some apparently new Canadian Psychodidae (Dipt.). Canad. Ent. Orillia **56** 1924 pp. 215–220.

527.—Curran, C. H. Four apparently undescribed Diptera from Canada. Canad. Ent. Orillia **56** 1924 pp. 250–253.

528.—Curran, C. H. Two undescribed species of *Cyrtopogon* with notes (Diptera). Canad. Ent. Orillia **56** 1924 pp. 277–280.

529.—Curran, C. H. A new Canadian Syrphid (Diptera). Canad. Ent. Orillia **56** 1924 p. 288.

530.—Curran, C. H. On the genus *Arctophyto* Townsend in North America (Tachinidae, Diptera). Canad. Ent. Orillia **56** 1924 pp. 302–303.

531.—Curran, C. H. A new *Dolichopus* from British Columbia (Dolichopodidae, Diptera). Canad. Ent. Orillia **56** 1924 pp. 304–305.

532.—Curran, C. H. On the identity of the genus *Ernestia* R. D. (Tachinidae, Dipt.). Ent. News Philadelphia **35** 1924 pp. 214–215.

533.—Curran, C. H. New species of *Ernestia* and *Mericia* (Dipt.: Tachinidae). Ent. News Philadelphia **35** 1924 pp. 245–250.

534.—Curran, C. H. Concerning the availability of certain taxonomic characters and their significance (Diptera). Psyche Boston **31** 1924 pp. 167–169.

535.—Curran, C. H. Brief diagnoses of some Diptera occurring in New England. Psyche Boston **31** 1924 pp. 226–228.

536.—Curran, C. H. The Dolichopodidae of South Africa. Ann. Transvaal Mus. Pretoria **10** 1924 p. 212–232. [Dipt.]

537.—Curran, C. H. Three new Dolichopodidae from British South Africa (Diptera). Rev. zool. afr. Brussels **12** 1924 pp. 469–475 1 fig.

538.—Cuscianna, N. L'anatomia dell' *Apis mellifica*, L. di razza italiana. Boll. Lab. zool. Portici **18** 1924 pp. 37–38 16 figs. [Hym.]

539.—Cushman, R. A. Change of name (Hymenoptera). Proc. Ent. Soc. Washington **26** 1924 p. 221.

540.—Cushman, R. A. On the systematic position of the genera *Collyria* Schiödte and *Ischnoceros* Gravenhorst (Hymenoptera). Proc. Ent. Soc. Washington **26** 1924 pp. 229–230.

541.—Cushman, R. A. New genera and species of Ichneumon-flies. Proc. U. S. Nat. Mus. Washington **64** 1924 art. 4 no. 2494 pp. 1–16 2 figs. [Hym.]

542.—Cushman, R. A. On the genera of the Ichneumon-flies of the tribe Paniscini, Ashmead, with descriptions and discussion of related genera and species. Proc. U. S. Nat. Mus. Washington **64** 1924 art. 20 no. 2510 48 pp. [Hym.]

543.—Cutright, C. R. Bionomics of *Hippodamia tredecim-punctata* L. Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 188–192. [Col.]

544.—Daglish, E. F. Our butterflies and moths and how to know them. London 1923 pp. 1–126.

545.—Dallas, E. D. Melomelía tarsal en un coleóptero argentino, *Scatophilus dasypleurus* (Germ.). Physis Buenos Aires **7** 1924 pp. 242–243 1 fig.

546.—Dalla Torre, C. G. Aphaniptera orbis terrarum. (Synopsis praecursoria). Ber. naturw. med. Ver. Innsbruck **39** 1924 pp. 1–29. [Siphon.]

547.—Dalla Torre, K. W. v. Alphabetisch-synonymisches Verzeichnis der paläarktischen Ceuthorrhynchidae im Sinne A. Schultzes. Ent. Jahrb. Leipzig **31** 1922 pp. 124–135. [Col.]

548.—Dalla Torre, K. W. von. Die Cossiden des palaearktischen Faunengebietes. Ent. Jahrb. Leipzig **33–34** 1924 pp. 102–104. [Lep.]

549.—Damant, G. C. C. The adjustment of the buoyancy of the larva of *Corethra plumicornis.* J. Physiol. Cambridge **59** 1924 pp. 345–356 2 figs. [Dipt.]

550.—Dampf, A. Über innere Begattungs-zeichen bei Tortriciden (Ins., Lepid.). Schr. physik. Ges. Königsberg **61-62** 1920–21 pp. 66–67 3 figs.

551.—Dampf, A. Zur Kenntnis der estländischen Hochmoorfauna, I. Beiträge zur Kunde Estlands Reval **10** 1924 pp. 33–49.

552.—Dampf, A. Zur Kenntnis der estländischen Moorfauna (II. Beitrag). Sitzungsber. Naturf.-ges. Univ. Dorpat **31** 1924 pp. 17–71 10 figs.

553.—Dampf, A. Estudio morfológico del gusano del maguey (*Acentrocneme hesperiaris* Wlk.). (Lepidoptera, Megathymidae.) Rev. mexicana de Biologia **4** 1924. Reprint 15 pp. 10 figs.

554.—Dauphin, A. Note sur *Bothriopterus angustatus* Duft. Misc. ent. Castanet-Tolosan **27** 1924 pp. 64–65. [Col.]

555.—Dauphin, A. Note sur une variété nouvelle de *Plagiogonus arcuatus* L. var. *buyssoni.* Misc. ent. Castanet-Tolosan **28** 1924 p. 42. [Col.]

556.—Davis, W. T. A. Northern form of the butterfly *Neonympha areolatus.* J. New York Ent. Soc. **32** 1924 pp. 105–107 4 figs. [Lep.]

557.—Dawson, R. W. & **McColloch,** J. W. New species of *Bolbocerosoma* (Scarabaeidae). Canad. Ent. Orillia **56** 1924 pp. 9–15. [Col.]

558.—Dayrem, J. *Clytanthus trifasciatus* F. v. *paradoxus.* Misc. ent. Castanet-Tolosan **27** 1924 p. 78. [Col.]

559.—Dayrem, J. Descriptions [*Leptura* (s. str.) *suberis* ♀]. Misc. ent. Castanet-Tolosan **28** 1924 pp. 35–36. [Col.]

560.—Debski, B. Traduction des diagnoses de diverses espèces égyptiennes de Fulgorelles et Jassides décrites en 1908 et 1910 par Matsumura (Hémipt.). Bull. Soc, R. ent. Egypte Cairo **1923** 1924 pp. 8–17.

561.—[Deksbakh, N. K.] Дексбах, Н. К. К биологии и распространению. *Aphelocheirus aestivalis* F. в бассейне Волги. [On the biology and distribution of *Aphelocheirus aestivalis* F. in the Volga Basin.] Arb. Biol. Wolga-Sta. Saratov **6** 1923 pp. 281–287 [Summary in German]. [Hem.]

562.—Delahon, P. Nachträge zu "Schilskys Systematischem Verzeichnis der Käfer Deutschlands" von 1909. (Col.). xiii. D. ent. Zs. Berlin **1924** pp. 259–264.

563.—Delève, J. Les *Omophron* congolais des collections du Musée de Tervueren. Rev. zool. afr. Brussels **12** 1924 pp. 103–111. [Col.]

564.—De Long, D. M. Some new Cicadellidae (Homoptera) from the Southern United States. J. New York Ent. Soc. **32** 1924 pp. 63–69 1 pl.

565.—De Long, D. M. Some observations on the life-cycle and habits of *Dorydiella floridana* Baker (Homoptera, Cicadellidae). Ohio J. Sci. Columbus **24** 1924 pp. 195–198 4 figs.

566.—Denis, J. R. Sur les Collemboles du Muséum de Paris. Ann. Soc. ent. France Paris **93** 1924 pp. 211–260 95 figs.

567.—Denis, J. R. Sur la faune française des Apterygotes. V. (Note préliminaire). Bull. Soc. ent. France Paris **1924** pp. 197–199.

568.—Denis, J. R. Sur la faune française des Apterygotes. Arch. Zool. Paris **62** 1924 pp. 253–297 38 figs.

569.—Depoli, G. Una nuova varietà di *Dorcadion* dell' isola di Rodi. Boll. Soc. ent. ital. Genoa **56** 1924 p. 43. [Col.]

570.—Derenne, F. Variations d'*Arctia caja* L. Rev. mens. Soc. ent. Namur **24** 1924 pp. 12–15. [Lep.]

571.—Derenne, F. Aberrations de Lépidoptères. Rev. mens. Soc. ent. Namur **24** 1924 pp. 35, 55–56, 66–67.

572.—Desbordes, H. Description de deux Histérides (Col.) nouveaux. Bull. Soc. ent. France Paris **1924** pp. 115–117.

573.—Desbordes, H. Description d'un *Lioderma* nouveau de l'Amérique du Sud (Col. Histeridae). Bull. Soc. ent. France Paris **1924** pp. 122–123.

574.—Desbordes, H. Description d'un Histéride nouveau du Tonkin (Col.). Bull. Soc. ent. France Paris **1924** pp. 141–142.

575.—Desbordes, H. Un genre nouveau et onze espèces nouvelles d'Histeridae (Col.) provenant du Congo Belge. Rev. zool. afr. Brussels **12** 1924 pp. 240–252.

576.—Dettmer, H. Neue Cynipiden aus den Niederlanden. Natuurhist. Maandblad Maastricht **13** 1924 pp. 126–127. [Hym.]

577.—Dettmer, H. Neue Cynipiden aus den Niederlanden, II. Natuurhist. Maandblad Maastricht **13** 1924 pp. 146–148. [Hym.]

578.—Deville, J. Ste.-C. Sur l'éthologie et la dispersion du *Philonthus coerulescens*, Lac. (*bodemeyeri*, Epp.) (Col., Staphylinidae). Bull. Soc. ent. France Paris **1924** pp. 23–24.

579.—Deville, J. Ste.-C. Faune des Coléoptères du Bassin de la Seine **6** (bis). Supplément aux Rhynchophora Paris 1924 pp. 1–159.

580.—Deville, J. Ste.-C. Kleinere Mitteilungen über die *Dyschirius*-Arten Europas. Koleopt. Rundsch. Vienna **11** 1924 pp. 20–24. [Col.]

581.—Dewitz, J. Experimentelle Untersuchungen über die Verwandlung der Insektenlarven. Zool. Jahrb. Jena Abt. allg. Zool. **41** 1924 pp. 245–334 4 figs.

582.—Dichtl, A. Einige Versuche über den Erschütterungssinn der Ameisen. Zs. wiss. Insektenbiol. Berlin **19** 1924 pp. 100–101. [Hym.]

583.—Dimitrova, A. Myrmeleonidae (Neuroptera, Insecta) von Bulgarien, Trazien and Mazedonien. Trav. Soc. bulgar. Sci. nat. Sofia **11** 1924 pp. 68–112, figs. [In Bulgarian.]

584.—Dingler, M. Biologische Notizen über verschiedene Cocciden. Zs. angew. Ent. Berlin **10** 1924 pp. 364–386 10 figs. [Hom.]

585.—Dingler, M. Eine neue Coccide an der Fichte. Zs. angew. Ent. Berlin **10** 1924 pp. 387–389 2 figs. [Hom.]

586.—Dixon, R. & **Eddy,** B. Personality of Insects. New York, C. W. Clark Co. 1924. [Not seen.]

587.—Doane, R. W. Turret-building Termites. Nat. Hist. New York **24** 1924 pp. 98–100 4 figs. [Isop.]

Dobroscky, I. D. *see* Shannon & Dobroscky.

588.—Dobrzhansky, T. Die geographische und individuelle Variabilität von *Harmonia axyridis* Pall. in ihren Wechselbeziehungen. Biol. Zentralbl. Leipzig **44** 1924 pp. 401–421 4 tables figs.

589.—Dobrzhansky, T. Die weiblichen Generationsorgane der Coccinelliden als Artmerkmal betrachtet (Col.). Ent. Mitt. Berlin **13** 1924 pp. 18–27.

590.—Dobrzhansky, T. Beitrag zur Kenntnis des weiblichen Geschlechtsapparates der Coccinelliden. Zs. wiss. Insektenbiol Berlin **19** 1924 pp. 98–100. [Col.]

591.—Dobrzhansky, T. Über den Bau des Geschlechtsapparats einiger Mutanten von *Drosophila melanogaster* Meig. Zs. indukt. Abstammgslehre Berlin **34** 1924 pp. 245–248. [Dipt.]

592.—Dobson, H. W. The two years' life-cycle of *Chrysomela fastuosa*, Scop. (Col. Chrysomelidae). Entomologist London **57** 1924 pp. 159–163.

Docters van Leeuwen, W. *see* Leeuwen.

593.—Dodero, A. Due nuovi Trechini ciechi italiani (Col.). Boll. Soc. ent. ital. Genoa **56** 1924 pp. 141–145.

594.—Dodonov, B. Zur Kenntnis der *Pachyrhina schummeli* Ried. (Dipt.) [17. Mitteilung aus der Entom. Abt. des Zoolog. Mus. der Univ. Moskau.] Ent. Mitt. Berlin **13** 1924 pp. 124–125.

595.—Dogiel, V. Researches on the parasitic Protozoa from the intestine of Termites. I. Tetramitidae. In Dogiel & Sokolow Sci. Results Zool. Exped. B.E. Africa & Uganda in 1914 **1** 1916 no. 2 67 pp. 4 figs. [Also in Russian.]

596.—Dolley, W. L. The relative stimulating efficiency of continuous and intermittent light in the Tachina fly, *Archytas aterrima*. Amer. J. Physiol. Baltimore **64** 1923 pp. 364–370. [Dipt.]

Dolley, W. L. *see* Mast & Dolley.

597.—Donisthorpe, H. Some notes on the European species of the Coleopterous genus *Euryusa* Erichson. Ent. Mo. Mag. London **60** 1924 pp. 217–224, 3 figs.

598.—Donisthorpe, H. Myrmecophilous notes for 1923. Ent. Rec. London **36** 1924 pp. 49–53 & 69–75.

599.—Donisthorpe, H. *Batrisodes delaportei*, Aubé, and *B. adnexus*, Hampe—two additions to the British List of Coleoptera. Ent. Rec. London **36** 1924 p. 117.

600.—Donisthorpe, H. Notes on the Myrmecophiles found with *Acanthomyops* (*Donisthorpea*) *brunneus* Latr. in Britain. Ent. Rec. London **36** 1924 pp. 121–122, 133–139.

601.—Dorn, K. Die *satrapa*- und die *praeustus*- Gruppe der Gattung *Elater*. Ent. Jahrb. Leipzig **31** 1922 pp. 117–121 1 pl. [Col.]

602.—Dorn, K. Ist *Saulcyella schmidti* ein Ameisengast ? Ent. Jahrb. Leipzig **33-34** 1924 pp. 119–122. [Col.]

603.—Dover, C. The insect fauna of an Indian Island. Nature London **114** 1924 p. 351–352 1 fig.

604.—Dover, C. Some observations on the bionomics of *Xylocopa aestuans* Linn. (Apidae). Trans. Ent. Soc. London **1924** pp. 144–149 1 fig. [Hym.]

605.—Dover, C. A key to the Indian species of the genus *Osmia* Panz. (Apidae.) Entomologist London **57** 1924 pp. 201–203. [Hym.]

606.—Dover, C. The blue-banded bees of the *Anthophora zonata* group in the British Museum. Entomologist London **57** 1924 pp. 226–232 4 figs. [Hym.]

607.—Dover, C. The Indian species of Apterogyna (Mutillidae). Ent. Mo. Mag. London **60** 1924 pp. 254–256. [Hym.]

608.—Dover, C. Aculeate Hymenoptera collected by Mr. Cyril Allen in Paraguay. Ent. Mo. Mag. London **60** 1924 pp. 256–258.

609.—Dover, C. The terminology of homotypes of insects. Science New York **60** 1924 p. 590.

610.—Dover, C. Notes on the genus *Nectarina* Shuckard (Vespidae). Psyche Boston **31** 1924 pp. 305–307 1 fig. [Hym.]

611.—Dow, R. P. Migration of *Pyrameis cardui*. J. New York Ent. Soc. **32** 1924 p. 121. [Lep.]

612.—Downes, W. New records of Hemiptera from British Columbia. Proc. Br. Columbia Ent. Soc. Vancouver **21** 1924 pp. 27–33.

613.—Draeseke, J. Die Schmetterlinge der Stötznerschen Ausbeute. II. Pieridae. D. ent. Zs. Iris Dresden **38** 1924 pp. 1–8. [Lep.]

614.—Draeseke, J. Die Schmetterlinge der Stötznerschen Ausbeute. Papilionidae. D. ent. Zs. Iris Dresden **37** 1923 pp. 53–60. [Lep.]

615.—Drake, C. J. A new genus and species of Piesmidae (Hemip.). Proc. Ent. Soc. Washington **26** 1924 pp. 85–88.

616.—Drake, C. J. A new species of *Acanthocheila* from Bolivia (Hemiptera-Tingitidae). Bull. Brooklyn Ent. Soc. **19** 1924 p. 94.

617.—Draudt, M. Die Grossschmetterlinge der Erde. Fauna Americana **7** 1924 pp. 15–92. [Lep.]

618.—Drenovski, A. Supplément aux matériaux sur l'étude des papillons à Sofia et aux environs. Trav. Soc. bulgar. Sci. nat. Sofia **2** 1904 pp. 253–261. [In Bulgarian; summary in French.]

619.—Drenovski, A. Le mont Vitoche et sa faune des papillons. Trav. Soc. bulgar. Sci. nat. Sofia **3** 1906 pp. 91–119. [In Bulgarian; summary in French.]

620.—Drenovski, A. K. Ueber einige neue Lepidopterenformen aus Bulgarien und Mazedonien. Trav. Soc. bulgar. Sci. nat. Sofia **10** 1923 pp. 181–192. [In Bulgarian.]

621.—Drenovski, A. K. Ueber die Metamorphose und Biologie dreier bulgarischen Schmetterlingen. Trav. Soc. bulgar. Sci. nat. Sofia **10** 1923 pp. 193–196 figs. [In Bulgarian.]

622.—Drenovski, A. K. Die Lepidopteren-Fauna der Zentral-Rhodopen in Bulgarien. Zs. wiss. Insektenbiol. Berlin **19** 1924 pp. 233–238.

623.—Druet, J. Note sur *Agrotis lucipeta* F. Rev. mens. Soc. ent. Namur **24** 1924 pp. 41–44. [Lep.]

624.—Drury, C. Notes on *Cychrus* and the sad misfortunes of an entomologist. J. New York Ent. Soc. **32** 1924 p. 122. [Col.]

625.—Dry, F. W. Sex ratio data for two Chalcid egg parasites of the coffee bug (*Antestia lineaticollis*). J. Genetics Cambridge **14** 1924 pp. 219–224.

626.—Duda, O. Beitrag zur Systematik der Drosophiliden unter besonderer Berücksichtigung der paläarktischen u. orientalischen Arten (Dipteren). Arch. Natg. Berlin **90** 1924 Abt. A. Heft 3 pp. 172–234 7 pls.

627.—Duda, O. Die Drosophiliden (Dipteren) des Deutschen Entomologischen Institutes d. Kaiser Wilhelm-Gesellschaft (früheres Deutsches Entomologisches Museum) aus H. Sauter's Formosa Ausbeute nebst Beschreibung zehn neuer südostasiatischer Drosophiliden des Amsterdamer Museums und des Wiener Staatsmuseums. Arch. Natg. Berlin **90** 1924 Abt. A. Heft 3 pp. 235–259.

628.—Duda, O. Berichtigungen zur Revision der europäischen Arten der Gattung *Limosina* Macq. (Dipteren) nebst Beschreibung von sechs neuen Arten. Verh. zool.-bot. Ges. Wien **73** (1923) 1924 pp. 163–180 7 figs.

629.—Duda, O. Beitrag sur Systematik der Limosinen-Untergattungen *Trachyopella* und *Elachisoma* und Beschreibung von *Elachisoma pilosa* n. sp. ♀ (Dipteren.) Konowia, Vienna **3** 1924 pp. 5–9 3 figs.

630.—Duda, O. Revision der europäischen u. grönländischen sowie einiger südostasiat. Arten der Gattung *Piophila* Fallén (Dipteren). Konowia, Vienna **3** 1924 pp. 97–113 & 153–203.

631.—Duda, O. Revision der europäischen Arten der Gattung *Drosophila* Fallén (Dipt.). Ent. Medd. Copenhagen **14** 1924 pp. 246–313 38 figs.

632.—Dudich, E. Aberrationen des *Cryptocephalus gamma* H.-Schäff. (Col. Chrysomelidae). Folia ent. hungarica Budapest **1** 1924 pp. 22–24.

633.—Dufour, G. Les *Erebia* des montagnes d'Auvergne. (Lepid.) Misc. ent. Castanet-Tolosan **28** 1924 pp. 9–13.

634.—Dunbar, C. O. Kansas Permian insects. Part I. The geologic occurrence and the environment of the insects. Amer. J. Sci. New Haven Conn. **7** 1924 pp. 171–209 2 pls. 4 figs.

635.—Duncan, C. D. *Dolichovespula diabolica* Sauss. and its supposed variety *fernaldi* Lewis (Hymenoptera, Vespidae). Pan-Pacific Ent. S. Francisco **1** 1924 pp. 40–42.

636.—Duncan, C. D. Spiracles as sound-producing organs. Pan-Pacific Ent. S. Francisco **1** 1924 pp. 42–43.

637.—Dürck, H. Sammel- und Tötungszylinder aus Celluloid. Ent. Rdsch. Stuttgart **41** 1924 pp. 3–4.

638.—Dürck, H. Ueber einen ausserordentlichen Massenflug von *Zygaena exulans* Hochenw. Ent. Rdsch. Stuttgart **41** 1924 pp. 6–7, 10–12. [Lep.]

639.—Dusmet y Alonso, J. M. Las *Xylocopa* (Hymen., Apidae) en las colecciones de Madrid. Trab. Mus. Nac. Ciencias nat. Madrid Ser. Zool. no. **49** 1924 58 pp.

640.—Dusmet y Alonso, J. M. Algunos himenópteros de Canarias. Bol. R. Soc. esp. Hist. nat. Madrid **24** 1924 pp. 455–458.

641.—Dyar, H. G. New Lepidoptera from Mexico and one from Argentina. Insec. Insc. Menst. Washington **12** 1924 pp. 15–21.

642.—Dyar, H. G. A new Noctuid from Louisiana (Lepidoptera, Noctuidae). *Op. cit.* **12** 1924 pp. 21–22.

643.—Dyar, H. G. Note on *Aëdes punctor* Kirby (Diptera, Culicidae). *Op. cit.* **12** 1924 pp. 24–26.

644.—Dyar, H. G. The mosquitoes of Colorado (Diptera, Culicidae). *Op. cit.* **12** 1924 pp. 39–46.

645.—Dyar, H. G. American references in the catalogue of Indian Culicidae (Diptera). *Op. cit.* **12** 1924 pp. 57–60.

646.—Dyar, H. G. A new Sabethid from Brazil (Diptera, Culicidae). *Op. cit.* **12** 1924 p. 92.

647.—Dyar, H. G. Note on *Culex tarsalis*, Coquillett (Diptera, Culicidae). *Op. cit.* **12** 1924 pp. 95–96.

648.—Dyar, H. G. A note on *Sabethes* Robineau-Desvoidy (Diptera, Culicidae). *Op. cit.* **12** 1924 pp. 97–100.

649.—Dyar, H. G. Notes on some Sabethids from Central America (Diptera, Culicidae). *Op. cit.* **12** 1924 pp. 101–104.

650.—Dyar, H. C. Notes on the Sabethids of the West Indies (Diptera, Culicidae). *Op. cit.* **12** 1924 pp. 104–107.

651.—Dyar, H. G. *Phoniomyia* and *Dendromyia* Theobald (Diptera, Culicidae). *Op. cit.* **12** 1924 pp. 107–113.

652.—Dyar, H. G. A note on *Wyeomyia* Theobald (Diptera, Culicidae). *Op. cit.* **12** 1924 pp. 113–117.

653.—Dyar, H. G. Note on the American *Aëdes* of the *scapularis* group. *Op. cit.* **12** 1924 pp. 117–119.

654.—Dyar, H. G. Some new mosquitoes from Colombia, I and II (Diptera, Culicidae). *Op. cit.* **12** 1924 pp. 119–124 & 183–186.

655.—Dyar, H. G. Two new mosquitoes from California (Diptera, Culicidae). *Op. cit.* **12** 1924 pp. 125–127.

656.—Dyar, H. G. A new mosquito from Siberia (Diptera, Culicidae). *Op. cit.* **12** 1924 pp. 127–128.

657.—Dyar, H. G. Mosquitoes from Chile (Diptera, Culicidae). *Op. cit.* **12** 1924 pp. 128–131.

658.—Dyar, H. G. The larva of *Aëdes alleni* Turner (Diptera, Culicidae). *Op. cit.* **12** 1924 pp. 131–132.

659.—Dyar, H. G. The larva of *Aëdes thelcter* Dyar (Diptera, Culicidae). *Op. cit.* **12** 1924 p. 132.

660.—Dyar, H. G. The larva of *Culiseta maccrackenae* Dyar & Knab (Diptera, Culicidae). *Op. cit.* **12** 1924 p. 144.

661.—Dyar, H. G. The male of *Anopheles vestitipennis* Dyar & Knab (Diptera, Culicidae). *Op. cit.* **12** 1924 p. 171.

662.—Dyar, H. G. Note on *Aëdes aloponotum* and other species of its region (Diptera, Culicidae). *Op. cit.* **12** 1924 pp. 176–179.

663.—Dyar, H. G. The American forms of *Aëdes cinereus* Meigen (Diptera, Culicidae). *Op. cit.* **12** 1924 pp. 179–180.

664.—Dyar, H. G. Notes on *Aëdes ventrovittis* Dyar (Diptera, Culicidae). *Op. cit.* **12** 1924 pp. 181–182.

665.—Dyar, H. G. Note on the larva of *Thyris maculata* (Lepidoptera, Thyrididae). *Op. cit.* **12** 1924 pp. 192–193.

666.—Dyar, H. G. & Shannon, R. C. New *Culex* from Panama (Diptera, Culicidae). Insec. Insc. Menst. Washington **12** 1924 pp. 46–48.

667.—Dyar, H. G. & Shannon, R. C. Notes on Sabethids from Panama (Diptera, Culicidae). Insec. Insc. Menst. Washington **12** 1924 pp. 85–91.

668.—Dyar, H. C. & Shannon, R. C. Another new *Culex* from Panama (Diptera, Culicidae). Insec. Insc. Menst. Washington **12** 1924 pp. 143–144.

669.—Dyar, H. G. & Shannon, R. C. The American Species of *Uranotaenia* (Diptera, Culicidae). Insec. Insc. Menst. Washington **12** 1924 pp. 187–192.

670.—Dyar, H. G. & Shannon, R. C. Some new species of American *Dixa* Meigen (Diptera, Culicidae). Insec. Insc. Menst. Washington **12** 1924 pp. 193–201.

671.—Dyar, H. G. & Shannon, R. C. The American Chaoborinae (Diptera, Culicidae). Insec. Insc. Menst. Washington **12** 1924 pp. 201–216.

672.—Dyar, H. G. & Shannon, R. C. The American species of Thaumalidae (Orphnephilidae) (Diptera). J. Wash. Acad. Sci. Baltimore **14** 1924 pp. 432–434.

673.—Ebner, R. Revision der Gattung *Psorodonotus* (Orthoptera, Phasgonuridae). Konowia, Vienna **2** 1923 pp. 249–256 7 figs.

674.—Eckstein, K. Bausteine zur Lebensgeschichte der Forleule. Zs. angew. Ent. Berlin **10** 1924 pp. 313–326 1 fig. [Lep.]

Eddy, B. *see* Dixon & Eddy.

675.—Edwards, F. W. New species of crane-flies collected by Mr. G. V. Hudson in New Zealand. Part II. Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 159–163. [Dipt.]

676.—Edwards, F. W. New data concerning *Styringomyia* (Diptera, Tipulidae). Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 265–274 9 figs.

677.—Edwards, F. W. Results of the Merton College Expedition to Spitsbergen 1923 (Diptera Nematocera). Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 162–174 6 figs.

678.—Edwards, F. W. A note on the "New Zealand Glow-worm" (Diptera, Mycetophilidae). Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 175–179.

679.—Edwards, F. W. New species of Nematocerous Diptera from Fiji and Trinidad. Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 568–574.

680.—Edwards, F. W. Notes on some British species of *Tipula*. Ent. Mo. Mag. London **60** 1924 pp. 81–85 2 figs. [Dipt.]

681.—Edwards, F. W. Some British species of *Corynoneura* (Diptera, Chironomidae). Ent. Mo. Mag. London **60** 1924 pp. 182–189 12 figs.

682.—Edwards, F. W. On the British species of *Thalassomyia* and *Cardiocladius* (Diptera, Chironomidae). Ent. Mo. Mag. London **60** 1924 pp. 203–207.

683.—Edwards, F. W. British mosquitoes. Entomologist London **57** 1924 pp. 25–29.

684.—Edwards, F. W. A synopsis of the adult mosquitoes of the Australasian Region. Bull. Ent. Res. London **14** 1924 pp. 351–401. [Dipt.]

685.—Edwards, F. W. Description of adults of two new species of *Forcipomyia*. Parasitology Cambridge **16** 1924 pp. 208–211. [Dipt.]

686.—Edwards, F. W. Descriptions of two new species of mosquitoes from coconut palms in East Africa. Trans. R. Soc. Trop. Med. & Hyg. London **18** 1924 pp. 197–198 (3 pls. p. 186). [Dipt.]

687.—Edwards, F. W. Notes on Meigen's fungus-gnat types. Encyc. ent. Ser. B **2** Dipt. **1** Paris Lechevalier 1924 pp. 13–17.

688.—Edwards, F. W. A note on the genus *Protanypus* Kieffer (Diptera, Chironomidae). Ann. Biol. lacustre Brussels **13** 1924 pp. 119–122 2 figs.

689.—Edwards, F. W. Notes on some European species of *Simulium* (Diptera). Ent. Tidsk. Stockholm **45** 1924 pp. 29–34.

690.—Edwards, F. W. Notes on the types of Mycetophilidae (Diptera) described by Staeger and Zetterstedt. Ent. Tidsk. Stockholm **45** 1924 pp. 160–168.

691.—Edwards, F. W. *Forcipomyia eques* Joh. in Europe (Diptera, Chironomidae). Not. ent. Helsingfors **4** 1924 p. 97.

692.—Edwards, F. W. Diptera of the Siju Cave, Garo Mills, Assam. II. Chironomidae. Rec. Ind. Mus. Calcutta **26** 1924 pp. 107–108.

693.—Edwards, F. W. Notes on the types of Diptera Nematocera (Mycetophilidae and Tipulidae) described by Mr. E. Brunetti. Rec. Ind. Mus. Calcutta **26** 1924 pp. 291–307.

694.—Edwards, F. W. Some mosquitos from Ovamboland, S.W. Africa, and from the Cape Province. Ann. S. Afr. Mus. Cape Town **19** 1924 pp. 159–163. [Dipt.]

695.—Edwards, J. On some new or little-known British Cicadina. Ent. Mo. Mag. London **60** 1924 pp. 52–58 9 figs. [Hom.]

696.—Efflatoun, H. C. Two new species of *Spheniscomyia* (Diptera, Trypaneidae) from Egypt. Bull. Soc. R. ent. Egypte Cairo **1923** 1924 pp. 132–139.

697.—Efflatoun, H. C. A new species of the galligenous genus *Euaresta* (Dipt.: Trypaneidae). Bull. Soc. R. ent. Egypte Cairo **1923** 1924 pp. 152–156.

698.—Eggers, F. O. On the structure of the stalked eye of Diopsidae. In Dogiel & Sokolow Sci. Results Zool. Exped. B.E. Africa and Uganda in 1914 **1** 1916 no. 7 48 pp. 1 pl. 1 fig. [Also in Russian.] [Dipt.]

699.—Eggers, F. O. On some new and incompletely known species of the family Diopsidae from British East Africa. In Dogiel & Sokolow Sci. Results Zool. Exped. B.E. Africa and Uganda in 1914 **1** 1916 no. 6 32 pp. 1 col. pl. [Also in Russian.] [Dipt.]

700.—Eggers, H. Neue Borkenkäfer (Ipidae) aus Afrika. (Nachtrag II.) Ent. Blätter Berlin **20** 1924 pp. 99–111. [Col.]

701.—Eichler, W. Verzeichnis der in kleinasiatischen Sandschaks Trapezunt und Gümisch-Chane in J. 1916–1917 gesammelten Coleopteren. III & IV. Polsk. Pismo ent. Lemberg **2** 1924 pp. 172–175; **3** 1924 pp. 80–87.

702.—Eichler, W. Nouvelles espèces et variétés de Coléoptères du Caucase et de l'Asie-mineure. Polsk. Pismo ent. Lemberg **3** 1924 pp. 61–68.

703.—Eidmann, H. Die Eiablage von *Trioxys* Hal. (Hym., Braconidae) nebst Bemerkungen über die wirtschaftliche Bedeutung dieses Blutlausparasiten. Zs. angew. Ent. Berlin **10** 1924 pp. 353–363 4 figs.

704.—Eidmann, H. Untersuchungen über Wachstum und Häutung der Insekten. Zs. Morph. Oekol. Tiere Berlin **2** 1924 pp. 567–610 16 figs.

705.—Eidmann, H. Untersuchungen über Wachstum und Häutung der Insekten. Verh. D. zool. Ges. Berlin **29** 1924 pp. 124–129.

706.—Eidmann, H. Untersuchungen über den Mechanismus der Häutung bei den Insekten. Arch. mikr. Anat. Entwickl. Berlin **102** 1924 pp. 276–290 2 figs.

707.—Eidmann, H. Das sogenannte "Praemaxillare" der Insekten. Zool. Anz. Leipzig **58** 1924 pp. 48–52 9 figs.

708.—Eidmann, H. Untersuchungen über die Morphologie und Physiologie des Kaumagens von *Periplaneta orientalis* L. Zs. wiss. Zool. Leipzig **122** 1924 pp. 281–309 10 figs. [Orth.]

709.—Eitel, K. Eine Form mit gelben Binden von *Pyram. atalanta.* Intern. ent. Zs. Guben **18** 1924 p. 141. [Lep.]

709a.—Eltringham, H. On the early stages of *Chrysiridia ripheus* Dru. Trans. Ent. Soc. London **1923** 1924 pp. 439–442 1 pl. [Lep.]

710.—Eltringham, H. On the tympanic organ in *Chrysiridia ripheus* Dru. Trans. Ent. Soc. London **1923** 1924 pp. 443–458 3 pls. 2 figs. [Lep.]

711.—Eltringham, H. Dr. V. G. L. van Someren's observations on the early stages of *Mimacraea marshalli dohertyi* Roth. (Rhopalocera). Trans. Ent. Soc. London **1924** pp. 152–159 1 pl. 1 fig. [Lep.]

712.—van Emden, F. Ueber Larvensystematik bei Insekten und Durchführung eines Systems bei Carabidenlarven. Ent. Jahrb. Leipzig **32** 1923 pp. 101–114 4 figs.

713.—van Emden, F. Zur Biologie von *Thorictoides heydeni* Reitt. (Col. Thorictidae). Treubia Buitenzorg **6** 1924 pp. 1–7 6 figs.

714.—van Emden, F. H. Sauter's Formosa-Ausbeute. Sandalidae. (Col.) (Zur Kenntnis der Sandalidae. I.) Ent. Mitt. Berlin **13** 1924 pp. 27–34 1 fig.

715.—van Emden, F. Zur Kenntnis der Sandalidae. II. u. III. Ent. Blätter Berlin **20** 1924 pp. 86–99 3 figs. [Col.]

716.—Emeljanoff, N. Intersexualität bei *Lymantria dispar* L. unter Einwirkung der Temperatur. Biol. Zentralbl. Leipzig **44** 1924 pp. 106–110 4 figs. [Lep.]

717.—Emery, C. Formiche tessitrici del genere *Oecophylla* fossili e viventi. Rend. Acc. Sci. Bologna **25** 1921 pp. 99–105 10 figs. [Hym.]

718.—Emery, C. Osservazioni in formicai artificiali su *Formica fusca glebaria* (Nyl.) e *Tetramorium caespitum* (L.). Rend. Acc. Sci. Bologna **27** 1923 pp. 38–41. [Hym.]

719.—Emery, C. Formiche della Cirenaica raccolte dal Dott. Enrico Festa e dal Prof. Filippo Silvestri. Boll. Soc. ent. ital. Genoa **56** 1924 pp. 6–11. [Hym.]

720.—Emery, C. Alcune formiche di Malta. Boll. Soc. ent. ital. Genoa **56** 1924 pp. 11–12. [Hym.]

721.—Emery, C. Formiche di Spagna raccolte dal Prof. Filippo Silvestri. Boll. Lab. Zool. Portici **17** 1924 pp. 164–171 2 figs. [Hym.]

722.—Enderlein, G. Neue paläarktische Simuliiden. SitzBer. Ges. natf. Freunde Berlin **1920** 1921 pp. 212–224. [Dipt.]

723.—Enderlein, G. Über die phyletisch älteren Stratiomyiiden-subfamilien (Xylophaginae, Chiromyzinae, Solvinae, Beridinae und Coenomyiinae). Mitt. Zool. Mus. Berlin **10** 1921 pp. 153–214 16 figs. [Dipt.]

724.—Enderlein, G. Beiträge zur Kenntnis der Platystominen. Mitt. Zool. Mus. Berlin **11** 1924 pp. 97–153. [Dipt.]

725.—Enderlein, G. Zur Klassifikation der Phoriden und über vernichtende Kritik. Ent. Mitt. Berlin **13** 1924 pp. 270–281. [Dipt.]

726.—Enderlein, G. Beiträge zur Kenntnis der Copeognathen. VII. Zwei neue Copeognathen aus dem Museum Paris. Konowia Vienna **2** 1923 pp. 32–33.

727.—Enderlein, G. Eine neue blutsaugende Muscide aus Afrika. Konowia Vienna **3** 1924 pp. 51–52. [Dipt.]

728.—Enderlein, G. Ueber die Drüsenhaare der Larven und Nymphen einiger Gattungen von Copeognathen. (Beiträge zur Kenntnis der Copeognathen. viii). Tijdschr. Ent. The Hague **67** 1924 Suppmt. pp. 72–74. [Psocopt.]

729.—Enderlein, G. Zur Kenntnis der estlandischen Moorfauna (II Beitrag). Copeognathen pp. 34–87. Simuliiden pp. 46–48. S. B. naturf. Ges. Dorpat **31** 1924.

730.—Engel, E. O. Studien über afrikanische Dipteren (Asiliden). Wiener ent. Ztg. Vienna **41** 1924 pp. 100–110.

731.—Engel, E. O. Das Rectum der Dipteren in morphologischer und histologischer Hinsicht. Zs. wiss. Zool. Leipzig **122** 1924 pp. 503–533 16 figs.

732.—Engelhardt, G. P. Field notes on western clear-wing moths (Aegeriidae). Bull. Brooklyn Ent. Soc. **19** 1924 pp. 125–127.

732a.—Enriques, P. Ricerche sulla credità della mosche. Riv. Biol. Rome **1** 1919 pp. 72–81. [Dipt.]

733.—Enslin, E. Ueber Blatt-und Holzwespen. Ent. Rdsch. Stuttgart **41** 1924 pp. 33–35 37–38. [Hym.]

734.—**Esaki,** T. On the genus *Halobates* from Japanese and Formosan Coasts (Hemiptera, Gerridae). Psyche Boston **31** 1924 pp. 112–118 1 pl

735.—**Esaki,** T. On the curious Halophilous Waterstrider, *Halovelia maritima* Bergroth (Hemiptera, Gerridae). Bull. Brooklyn Ent. Soc. **19** 1924 pp. 29–34 5 figs.

736.—**Esaki,** T. On a new genus and species of the Gerridae from Formosa. Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 228–230 1 fig.

737.—**Esaki,** T. & **Nakahara,** W. Undescribed Rhopalocera from Japan and Formosa (Lepidoptera, Nymphalidae and Satyridae). Insec. Insc. Menst. Washington **12** 1924 pp. 55–57 1 pl.

738.—**Esben-Petersen,** P. Ueber das Genus *Dendroleon* Brauer. Konowia Vienna **2** 1923 pp. 86–92 4 figs.

739.—**Esben-Petersen,** P. South African Megaloptera. Ann. S. Afr. Mus. Cape Town **19** 1924 pp. 151–158 7 figs.

740.—**Escalera,** M. M. de la. Enumeración de las especies españolas de *Dorcadion* (Col., Ceramb.) del Museo de Madrid, y descripción de algunas formas nuevas. Bol. R. Soc. esp. Hist. nat. Madrid **24** 1924 pp. 191–200.

741.—**Escalera,** M. M. de la. Otra localidad de *Xylodrepa quadripunctata* Schr. (Col., Silphidae) en la provincia de Madrid. Bol. R. Soc. esp. Hist. nat. Madrid **24** 1924 pp. 352–353.

742.—**Escalera,** M. M. de la. Dos especies más de *Lacordairius* (Col., Curcul.) de Marruecos. Bol. R. Soc. esp. Hist. nat. Madrid **24** 1924 pp. 353–355 2 figs.

743.—**Escalera,** M. M. de la. Especies nuevas de Curculiónidos y Tenebriónidos de Marruecos. Bol. R. Soc. esp. Hist. nat. Madrid **24** 1924 pp. 372–375. [Col.]

744.—**Escherich,** K. Aufgaben der Forstentomologie. Allgem. Forst- u. Jagdztg. Frankfort o. M. **100** January 1924. Reprint 4 pp.

745.—**Evans,** A. M. Descriptions of new mosquitos from South America. Ann. Trop. Med. and Parasit. Liverpool **18** 1924 pp. 363–375 7 figs. [Dipt.]

Evans, A. M. *see* Newstead, Evans & Potts.

746.—**Evans,** W. H. The identification of Indian butterflies. J. Bombay Nat. Hist. Soc. **29** 1924 pp. 890–907 5 pls.; **30** 1924 pp. 72–96 4 pls.

747.—**Evans,** W. H. Notes on Indian butterflies. J. Bombay Nat. Hist. Soc. **29** 1924 pp. 971–973.

748.—**Everts,** E. Nieuwe vondsten voor de Nederlandsche Coleopterenfauna. xlii. Ent. Ber. The Hague **6** 1924 pp. 277–285.

749.—**Ewing,** H. E. On the taxonomy, biology and distribution of the biting lice of the family Gyropidae. Proc. U.S. Nat. Mus. Washington **63** 1924 Art. 20 no. 2489 pp. 1–42 1 pl. 18 figs. [Mallophaga.]

750.—**Ewing,** H. E. Florida Proturans. Ent. News Philadelphia **35** 1924 pp. 44–46.

751.—**Ewing,** H. E. Bird-infesting Mallophaga collected by the Williams Galapagos Expedition. Zoologica New York **5** 1924 pp. 81–84 1 fig.

752.—**Ewing,** H. E. Sucking lice from Jack Rabbits. Amer. J. Trop. Med. Baltimore **4** 1924 pp. 547–551. [Anoplura.]

753.—**Ewing,** H. E. A collection of fleas from the Island of Hawaii. Proc. Ent. Soc. Washington **26** 1924 pp. 209–210. [Siphon.]

754.—**Ewing,** H. E. Ectoparasites of some Polynesian and Malaysian rats of the genus *Rattus*. Bern. P. Bish. Mus. Honolulu Bull. **14** 1924 pp. 7–11.

755.—**Ewing,** H. E. Notes on the taxonomy and natural relationships of fleas, with descriptions of four new species. Parasitology Cambridge **16** 1924 pp. 341–354 1 pl. 1 fig.

756.—**Eyer,** J. R. The comparative morphology of the male genitalia of the primitive Lepidoptera. Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 275–328 14 pls. 10 figs.

757.—**Eysell,** A. Die Krankheitsüberträger und Krankheitserreger unter den Arthropoden. 454 pp. 302 figs. 6 plates in C. Mense. Handbuch der Tropenkrankheiten. 3rd edition. Vol. I. J. A. Barth, Leipzig 1924.

758.—Fagniez, C. Description d'un nouveau *Duvalites* Jeann. des Basses-Alpes (Col. Trechinae). Bull. Soc. ent. France Paris **1924** pp. 130–131.

759.—Fagnoul, F. Die benannten Aberrationen von *Parnassius apollo* Linné, nebst einigen Bemerkungen hierzu. Mitt. badischen ent. Ver. Freiburg i. Br. **1** 1923 pp. 5–12, 1924 pp. 33–42 103–108 2 figs. [Lep.]

760.—Fahringer, J. Neue *Pezomachus*-Arten aus Albanien. Konowia Vienna **2** 1923 pp. 11–15. [Hym.]

761.—Fahringer, J. Die Galle von *Cynips kollari* Htg. Zuchtversuche und Beobachtungen über Bewohner und Feinde. Konowia Vienna **3** 1924 pp. 114–135. [Hym.]

762.—Falconer, W. Plant galls of the Llangollen District. Lancs. Ches. Nat. **16** 1924 pp. 117–123.

763.—Falconer, W. Plant galls of the Huddersfield district. Naturalist London **1924** pp. 151–156, 215–218.

764.—Fall, H. C. New species of North American Hydrobini. J. New York Ent. Soc. **32** 1924 pp. 85–89. [Col.]

765.—Fall, H. C. Some notes on *Cercyon*, with descriptions of three new species. Psyche Boston **31** 1924 pp. 247–253. [Col.]

766.—Fall, H. C. The blueberry leaf-beetle and some of its relatives. Part One. Systematic. The New England species of *Galerucella*. Maine Agric. Expt. Sta. Orono Bull. **319** 1924 pp. 81–91. [Col.]

767.—Falzoni, A. Sui *Malthodes ganglbaueri* Fiori e *cognatus* Costa. Boll. Soc. ent. ital. Genoa **56** 1924 pp. 106–110 3 figs. [Col.]

768.—Fassl, A. H. Die Weibchen von zwei *Agrias*-Stammformen Entdeckt. Ent. Rdsch. Stuttgart **41** 1924 pp. 14–15.

769.—Fassnidge, W. A locality in the High Alps, Névacke-le-Château. Ent. Rec. London **36** 1924 pp. 55–60, 139–141.

770.—Fassnidge, W. List of the Macro-Lepidoptera of Hampshire and the Isle of Wight. Ent. Rec. London **36** 1924 sep. pp. 17–40.

771.—Faure, J. C. Mode de succion de *Pachyneuron* sp. Chalcidien parasite des pupes de *Syrphus balteatus* DeG. Exposition Internat. Cent. Pasteur Strasbourg Juin-Oct. **1923** Cong. Path. vég. 1923 pp. 51–53. [Hym.]

772.—Faure, J. C. Nouvelles observations biologiques sur un *Pachyneuron* sp., parasite des pupes de *Syrphus balteatus* deG. Rev. Path. vég. & Ent. agric. Paris **10** 1923 pp. 255–258. [Hym.]

773.—Faure, J. C. Études sur la ponte et le mode de nutrition chez *Pteromalus variabilis* Ratz. et *Eurytoma appendigaster* Dalm., Chalcidiens parasites de l'*Apanteles glomeratus* L. Rev. Zool. agric. & appl. Bordeaux **23** 1924 pp. 225–233 2 figs. [Hym.]

774.—Feige, C. & **Kühlhorn,** F. In der Umgebung von Eisleben gefundene Käfer, welche in dem Verzeichnis von Eggers nicht aufgeführt sind. 1. Fortsetzung. Ent. Blätter Berlin **20** 1924 pp. 17–26. [Col.]

775.—Fenton, F. A. New parasitic Hymenoptera of the sub-family Anteoninae (Bethylidae). Ohio J. Sci. Columbus **24** 1924 pp. 191–194 4 figs.

776.—Ferguson, E. W. Notes on the nomenclature of Australian Tabanidae: Subfamily Pangoniinae. Bull. Ent. Res. London **14** 1924 pp. 251–263. [Dipt.]

777.—Fernández, A. Variaciones en la nerviación alar de la geómetra *Enconista* (*Paronychora*) *oberthuri* Vazq. Bol. R. Soc. esp. Hist. nat. Madrid **24** 1924 pp. 43–48 9 figs. [Lep.]

Ferreira d'Almeida *see* d'Almeida, R. F.

778.—Ferrière, C. Note sur deux nouveaux Chalcidiens phytophages du Paraguay. Ann. Soc. ent. France Paris **93** 1924 pp. 1–21 21 figs. [Hym.]

779.—Ferris, G. F. The nymphs of two species of Chermidae (Hemiptera). Pan-Pacific Ent. S. Francisco **1** 1924 pp. 24–26 2 figs.

780.—Ferris, G. F. The New World Nycteribiidae (Diptera Pupipara). Ent. News Philadelphia **35** 1924 pp. 191–199 1 fig. 1 pl.

781.—**Ferris,** G. F. A note on some Hippoboscidae (Diptera Pupipara). Ent. News Philadelphia **35** 1924 pp. 234–235.

782.—**Ferris,** G. F. Report upon a collection of insect Ectoparasites from Australian and Tasmanian mammals. Amer. Mus. Novit. New York no. **110** 1924 pp. 1–7 5 figs.

783.—**Ferris,** G. F. The study of minute insects. Canad. Ent. Orillia **56** 1924 pp. 25–28.

784.—**Ferris,** G. F. Two Diptera Pupipara from Philippine Bats. Philipp. J. Sci. Manila **24** 1924 pp. 73–78 3 figs.

785.—**Ferris,** G. F. Some Diptera Pupipara from the Philippine Islands. Philipp. J. Sci. Manila **25** 1924 pp. 391–401 7 figs.

786.—**Ferris,** G. F. The Mallophagan Family Menoponidae. Part I. Parasitology Cambridge **16** 1924 pp. 55–66 5 figs.

787.—**Ferris** G. F. Rept. Sci. Res. Norweg. Exped. Novaya Zemlya 1921 No. 8. Mallophaga. Christiania 1923 pp. 11–12.

788.—**Ferton,** C. Sur l'instinct des Pompiles. Rev. Zool. agric. & app. Bordeaux **23** 1924 pp. 100–104. [Hym.]

789.—**Finzi,** B. Formiche dell'Isola d'Elba e Monte Argentario. Boll. Soc. ent. ital. Genoa **56** 1924 pp. 12–15. [Hym.]

790.—**Finzi,** B. Secondo contributo alla conoscenza della fauna mirmecologica della Venezia Giulia. Bol. Soc. ent. ital. Genoa **56** 1924 pp. 120–123. [Hym.]

791.—**Fischer,** E. Ueber die zweibrütigkeit der *P. bryoniae* O. Mitt. münchn. ent. Ges. **14** 1924 pp. 8–10. [Lep.]

792.—**Fischer,** E. Wie können die Stürzpuppen sich aufhängen, ohne hinunterzufallen ? Ent. Zs. Frankfort o. M. **37** 1924 pp. 51–52. [Lep.]

93.—**Fischer,** E. Die F_2-Generation eines Artbastardes. Schweiz. ent. Anz. Zürich **3** 1924 pp. 53–54. [Lep.]

Fischer, E. *see* Surcouf & Fischer.

794.—**Fisher,** W. S. A new species of *Brachys* from Arizona (Coleoptera Buprestidae). Proc. Ent. Soc. Washington **26** 1924 pp. 12–13.

795.—**Fisher,** W. S. A new species of *Ataxia* from the United States (Coleoptera : Cerambycidae). Canad. Ent. Orillia **56** 1924 pp. 253–254.

796.—**Fisher,** W. S. New Buprestid beetles from the Philippine Islands. I. Philipp. J. Sci. Manila **24** 1924 pp. 45–52. [Col.]

797.—**Fleury,** P. de. Description d'un *Myrina* nouveau originaire de la Guinée française. (Lep , Lycaenidae). Bull. Soc. ent. France Paris **1924** pp. 161–162.

798.—**Fleury,** P. de. Descriptions de chenilles de Sphingides de l'Afrique occidentale. Bull. Soc. ent. France Paris **1924** pp. 185–186. [Lep.]

799.—**Fleury,** P. de. Description d'une nouvelle espèce de Saturnide de la côte occidentale d'Afrique [Lep.]. Bull. Soc. ent. France Paris **1924** pp. 219–221.

800.—**Fleutiaux,** E. Elateridae. Voy. Babault Afrique or. angl. Paris 1921 pp. 1–19. [Col.]

801.—**Fleutiaux,** E. Deux Melasidae nouveaux d'Indochine française de la collection du Muséum National d'Histoire naturelle de Paris. Bull. Mus. Hist. nat. Paris **1924** pp. 285–286. [Col.]

802.—**Fleutiaux,** E. Remarques sur les espèces du genre *Pterotarsus* Gu´rin (*Galba* auct.) (Coleoptera, Melasides). Ann. Soc. ent. France Paris **92** (1923) 1924 pp. 301–309.

803.—**Fleutiaux,** E. Genre nouveau et espèces nouvelles de Melasidae (Col.) du Tonkin. Bull. Soc. ent. France Paris **1924** pp. 156–158.

804.—**Fleutiaux,** E. Description d'une nouvelle espèce d'Elateridae du genre *Hemirhipus*. Bull. Soc. ent. France Paris **1924** pp. 183–184. [Col.]

805.—**Fleutiaux,** E. Coleoptera of the Siju Cave, Garo Hills, Assam. III Elateridae. Rec. Ind. Mus. Calcutta **26** 1924 p. 119.

806.—Flint, W. P., **Chandler,** S. C. & **Glenn,** P. A. The apple flea-weevil *Orchestes pallicornis* Say (Order Coleoptera, Family Curculionidae). Bull. Illinois Nat. Hist. Survey Urbana **15** 1924 37 pp. 16 figs.

807.—Foà, A. Le nostre conoscenze sulla determinazione del sesso e la loro applicazione al Baco da Seta. Boll. R. Staz. speriment. Gelsicoltura e Bachicoltura Ascoli Piceno **3** 1924 pp. 14–54. [Lep.]

808.—Folsom, J. W. New species of Collembola from New York State. Amer. Mus. Novit. New York no. **108** 1924 pp. 1–12 33 figs.

809.—Folsom, J. W. Apterygota of the Williams Galapagos Expedition. Zoologica New York **5** 1924 pp. 67–76 3 pls.

810.—Folsom, J. W. East Indian Collembola. Bull. Mus. Comp. Zoöl. Cambridge Mass. **65** 1924 pp. 505–517 5 pls.

811.—Forbes, W. T. M. The Lepidoptera of New York and neighbouring States. Primitive forms, Microlepidoptera, Pyraloids, Bombyces. Cornell Univ. Agric. Expt. Sta. Ithaca Mem. **68** 1923 729 pp. 439 figs.

812.—Forbes, W. T. M. The genus *Mechanitis* Fabr. (Lepidoptera, Ithomiinae). J. New York Ent. Soc. **32** 1924 pp. 146–158 1 pl.

813.—Forbes, W. T. M. The occurrence of nygmata in the wings of Insecta Holometabola. Ent. News, Philadelphia **35** 1924 pp. 230–232 1 pl.

814.—Forbes, W. T. M. The family position of *Graphelysia* (Lepidoptera). Psyche Boston **31** 1924 pp. 146–147.

815.—Forbes, W. T. M. How a beetle folds its wings. Psyche Boston **31** 1924 pp. 254–258 1 pl. [Col.]

816.—Ford, E. B. The geographical races of *Heodes phlaeas* L. Trans. Ent. Soc. London **1923** 1924 pp. 692–743 1 pl. [Lep.]

817.—Ford, H. D. Notes from the log-book of a Cumberland garden. Entomologist London **57** 1924 pp. 34–37.

818.—Fordham, W. J. *Methoca ichneumonoides* Lat., and other Hymenoptera on Allerthorpe Common, East Yorks. Naturalist London **1924** pp. 303–306.

819.—Forsius, R. Ueber eine Massenzucht von *Hyponomeuta padi* L. Not. ent. Helsingfors **4** 1924 pp. 44–46. [Lep.]

820.—Forsius, R. On Ceratopogoninae as ectoparasites of Neuroptera. Not. ent. Helsingfors **4** 1924 pp. 98–99. [Dipt.]

821.—Fouts, R. M. Revision of the North American wasps of the subfamily Platygasterinae. Proc. U. S. Nat. Mus. Washington **63** 1924 Art. 15a no. 2484 pp. 1–145 1 pl. 10 figs.

822.—Fouts, R. M. New Bethylid and Serphoid parasites from North America (Hymenoptera). Proc. Ent. Soc. Washington **26** 1924 pp. 159–166.

823.—Fox, C. L. A new Lycaenid (Lep.) from the Pacific Coast. Ent. News Philadelphia **35** 1924 pp. 140–141.

824.—Fracker, S. D. & **Bruner,** S. C. Notes on some neotropical Reduviidae. Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 163–174 1 fig. [Hem.]

825.—Fraser, F. C. Zoological results of the Percy Sladen Trust Expedition to Yunnan under the leadership of Professor J. W. Gregory, F.R.S. (1922). Odonata. J. Asiat. Soc. Beng. Calcutta **19** (1923) 1924 pp. 447–464 8 figs.

826.—Fraser, F. C. New additions to the Odonate (Dragonfly) fauna of India. J. Bombay Nat. Hist. Soc. **30** 1924 pp. 48–53 2 figs.

827.—Fraser, F. C. Indian dragonflies, xviii–xix. J. Bombay Nat. Hist. Soc. **29** 1924 pp. 982–1006 2 pls. 2 figs.; **30** 1924 pp. 106–117 1 pl. 2 figs.

828.—Fraser, F. C. Notes on Indian Odonata in the Pusa collection. Mem. Dept. Agric. India Calcutta **8** 1924 pp. 69–87 2 figs. 2 pls.

829.—Frederikse, A. M. Rudimentary parthenogenesis in *Tenebrio molitor* L. J. Genetics Cambridge **14** 1924 pp. 93–100 1 pl. 6 figs. [Col.]

830.—Freeborn, S. B. The "Proepimera" of the Culicidae. Insec. Insc. Menst. Washington **12** 1924 pp. 37–38 1 pl.

831.—Fresca, A. G. Malófagos del Museo de Madrid. III. Un Tricodéctido nuevo. Bol. R. Soc. esp. Hist. nat. Madrid **24** 1924 pp. 75–78 2 figs. [Malloph.]

832.—Fresca, A. G. Malófagos del museo de Madrid. IV. Notas sobre *Ricinus*. Bol. R. Soc. esp. Hist. nat. Madrid **24** 1924 pp. 274–276 1 fig. [Malloph.]

833.—Frey, R. Die nordpaläarktischen *Tetanocera*-Arten (Dipt., Sciomyzidae). Not. ent. Helsingfors **4** 1924 pp. 47–53 12 figs.

834.—Frey, R. Philippinische Dipteren. II. Fam. Dolichopodidae. Not. ent. Helsingfors **4** 1924 pp. 115–123.

835.—Friederichs, K. Bionomische gegevens omtrent den Koffiebessenboeboek. Meded. Koffiebessenboeboek-Fonds Malang no. **11** 1924 pp. 261–286. [With an English summary.] [Col.]

836.—Friese, H. Ueber einige neue *Euglossa*-Arten. Konowia Vienna **2** 1923 pp. 24–28. [Hym.]

837.—Friese, H. Neue Formen der Bienengattungen *Centris-Epicharis*. Konowia Vienna **3** 1924 pp. 19–22. [Hym.]

838.—Friese, H. Ueber die Bienen Australiens. Konowia Vienna **3** 1924 pp. 216–249. [Hym.]

839.—Friese, H. Ueber die Arten der Bienengattung *Allodape* in Afrika. (Hym. Apid.) D. ent. Zs. Berlin **1924** pp. 65–81.

840.—Friese, H. Ueber die Nestzellen der Blattschneiderbiene *Megachile azteca* Cress. (bei San José de Costa Rica). Zs. wiss. Insektenbiol. Berlin **19** 1924 pp. 193–194 1 fig. [Hym.]

841.—Friese, H., **Kiaer,** H., **Kieffer,** J. J., **Roman,** A. Rept. Sci. Res. Norweg. Exped. Novaya Zemlya 1921 no. 14. Hymenoptera. Christiania 1923 pp. 1–25.

842.—Friese, H. & **Schulthess,** A. v. Neue Hymenopteren aus paläarktisch Afrika und Asien. Konowia Vienna **2** 1923 pp. 279–294 5 figs.

843.—v. Frisch, K. Sinnesphysiologie und "Sprache" der Bienen. Berlin, Julius Springer **1924** 27 pp. 3 figs.; also in Naturwissenschaften Berlin **12** 1924 pp. 981–987 3 figs. [Hym.]

844.—Frison, T. H. Notes on North American Bremidae (Hym.). Canad. Ent. Orillia **56** 1924 pp. 292–296.

845.—Froggatt, W. W. Notes on Cleridae. Austral. Nat. Sydney **5** 1924 pp. 172–174. [Col.]

846.—Frohawk, F. W. Natural history of British butterflies. London **1** 1924 pp. 1–207; **2** 1924 pp. 1–206 65 pls.

847.—Frost, S. W. The leaf-mining habit in the Coleoptera. Part I. Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 457–467 1 pl.

848.—Frühauf, E. Legeapparat und Eiablage bei Gallwespen (Cynipidae). Zs. wiss. Zool. Leipzig **121** 1924 pp. 656–723 19 figs. [Hym.]

849.—Fruhstorfer, H. Lycaenidae (part). Die Gross-schmetterlinge der Erde. Fauna indoaustralica **9** 1923 pp. 897–901. [Lep.]

850.—Fruhstorfer, H. Neue und seltene *Parnassius*-Rassen. Ent. Anz. Vienna **4** 1924 pp. 6–7, 17–21, 77–78, 142–143. [Lep.]

851.—Fudakowski, J. Neue und bekannte Standorte von *Boreus hiemalis* L. u. *B. westwoodi* Hag. in Polen. Polsk. Pismo ent., Lemberg **2** 1924 pp. 202–204. [Mecoptera.]

852.—Fudakowski, J. Les Odonates de la fosse du Dunajec (Chaîne des Carpathes). Polsk. Pismo ent. Lemberg **3** 1924 pp. 75–80.

853.—de la Fuente, J. M. Enumeración de las especies zoológicas que han sido descritas por primera vez, ose describen ahora, sobre ejemplares procedentes de la provincia de Ciudad Real. Bol. R. Soc. esp. Hist. nat. Madrid **24** 1924 pp. 203–207.

854.—**de la Fuente y Morales,** J. M. Catálogo sistemático-geográfico de los coleópteros observados en la peninsula ibérica, Pirineos propiamente dichos y Baleares. Bol. Soc. ent. España, Saragossa **7** 1924 pp. 20–32, 35–50, 67–82, 88–103, 109–124.

855.—**Fullaway,** D. T. Notes on Coccinellidae. Proc. Hawaiian Ent. Soc. Honolulu **5** 1924 pp. 371–374. [Col.]

856.—**Fuller,** C. A question of synonymy. S. Afr. J. Nat. Hist. Pretoria **4** 1924 pp. 277–280. [Isoptera.]

857.—**Fuller,** C. Termite Nomenclature. S. Afr. J. Nat. Hist. Pretoria **4** 1924 pp. 356–364. [Isoptera.]

858.—**Fuller,** M. Observations on the Praying Mantis. Austral. Nat. Sydney **5** 1924 pp. 185–187. [Orth.]

859.—**Fulmek,** L. Eine neue Hystricothripide auf *Eugenia* sp. in Sumatra. Treubia, Buitenzorg **6** 1924 pp. 8–11, 5 figs. [Thysanopt.]

860.—**Fulton,** B. B. Some habits of Earwigs. Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 357–367 1 fig. [Orth.]

Gabriel, A. G. *see* Riley & Gabriel.

861.—**Gabritschevsky,** E. Farben polymorphismus und Vererbung mimetischer Varietäten der Fliege *Volucella bombylans* und anderer "hummerähnlicher" Zweiflügler. Zs. indukt. Abstammgslehre Berlin **32** 1924 pp. 321–353. [Dipt.]

Gadeau de Kerville, H. *see* Kerville, H. G. de.

862.—**Gahan,** A. B. Some new parasitic Hymenoptera with notes on several described forms. Proc. U. S. Nat. Mus. Washington **65** 1924 Art. 4 no. 2517 pp. 1–23.

863.—**Gahan,** A. B. The systematic position of the genus *Harmolita* Motschulsky with additional notes (Hymenoptera). Proc. Ent. Soc. Washington **26** 1924 pp. 224–229 1 fig.

864.—**Gahan,** A. B. On the identity of *Eurytoma oleariae* Maskell. Trans. N. Zealand Inst. Wellington **55** 1924 pp. 687–688. [Hym.]

865.—**Gallard,** L. Notes on *Opius tryoni.* Austral. Nat. Sydney **5** 1924 pp. 187–188. [Hym.]

866.—**Galvagni,** E. *Hypochalcia dignella* Hb. ab. nov. *paleella.* Verh. zool. bot. Ges. Wien **73** (1923) 1924 pp. (4)–(5). [Lep.]

867.—**Galvagni,** E. Einen albinotischen Falter *Coenonympha arcania* L. Verh. zool.-bot. Ges. Wien **73** (1923) 1924 p. (155). [Lep.]

868.—**Garrett,** C. B. D. Some new American Helomyzidae (Diptera). Insec. Insc. Menst. Washington **12** 1924 pp. 26–34.

869.—**Garrett,** C. B. D. On British Columbia Mycetophilidae I & II (Diptera). Insec. Insc. Menst. Washington **12** 1924 pp. 60–67 & 159–169.

870.—**Garrison,** G. L. Rearing records of *Pollenia rudis,* Fab. (Dipt.; Muscidae). Ent. News Philadelphia **35** 1924 pp. 135–138.

871.—**Gates,** R. R. Species and chromosomes. Nature London **114** 1924 pp. 353–356.

872.—**Gaubert,** P. Sur la polarisation circulaire de la lumière réfléchie par les insectes. C.R. Acad. Sci. Paris **179** 1924 pp. 1148–1150.

873.—**Gauckler,** H. Etwas über die Zucht von *Acidalia muricata* Hufn. Ent. Zs. Frankfort o. M. **37** 1924 p. 53. [Lep.]

874.—**Gautier,** C. & **Bonnamour,** S. Description d'une espèce nouvelle de *Trioxys* (Hym. Braconidae Aphidiinae). Bull. Soc. ent. France Paris **1924** pp. 43–44.

Gauthier, H. *see* Villeneuve & Gauthier.

875.—**Gehlen,** B. Eine neue Sphingide. Intern. ent. Zs. Guben **18** 1924 pp. 145–146 1 fig. [Lep.]

876.—**Gehlen,** B. *Pholus translineatus* Rothsch. Intern. ent. Zs. Guben **18** 1924 p. 173. [Lep.]

877.—**Gentner,** L. G. Notes on North American Halticinae with descriptions of two new species and a new variety (Coleoptera). Ent. News Philadelphia **35** 1924 pp. 164–168.

878.—**Gerould, J.** Periodic reversal of heart-beat in a chrysalis. Science New York **60** 1924 pp. 570–572. [Lep.]

879.—**Gestro, R.** Contributo allo studio dei Paussidi della Somalia. Boll. Soc. ent. ital. Genoa **56** 1924 pp. 17–19. [Col.]

880.—**Ghika, G. v.** *Oxytrypia orbiculosa* Esp. Intern. ent. Zs. Guben **18** 1924 pp. 193–198. [Lep.]

881.—**Ghika, G. v.** *Rhyparioides metelkana* Led. Intern. ent. Zs. Guben **18** 1924 pp. 204–209, 215–216. [Lep.]

882.—**Giacomelli, E.** Sobre el significado mimético de las manchas ocelares y en general de la superficie inferior de las alas en el género *Caligo* (Fam. Brassolidae). Rev. chil. Hist. nat. Santiago **27** (1923) 1924 pp. 16–19. [Lep.]

Giffard, W. M. *see* Muir & Giffard.

883.—**Gil, J.** Sobre un diptero parasito de la *Graellsia isabellae.* Bol. R. Soc. esp. Hist. nat. Madrid **24** 1924 pp. 350–351.

884.—**Gillet, J. J. E.** Scarabéides coprophages de Sumatra. Ann. Soc. ent. Belg. Brussels **64** 1924 pp. 102–104. [Col.]

885.—**Gillet, J. J. E.** A preliminary account of the Lamellicornia collected in Ceylon by Prof. E. Bugnion during the years 1906 to 1913. Spolia Zeylanica Colombo **13** 1924 pp. 121–127. [Col.]

886.—**Gillette, C. P. & Palmer, M. A.** New Colorado Lachnini. Ann. Ent. Soc. America Columbus **17** 1924 pp. 1-44 13 pls. 1 fig. [Hom.]

887.—**Gillmer, M.** Verzeichnis der bei Parchim gefundenen Eupithecien. Arch. Ver. Natg. Güstrow **74** 1921 pp. 56–73; **75** 1922 pp. 1–17. [Lep.]

888.—**Gillmer, M.** Die Papilionidae und Pieridae der Umgebung Parchims entwicklungsgeschichtlich dargestellt. Arch. Ver. Natg. Güstrow **75** 1922 pp. 36–48. [Lep.]

889.—**Gillott, G. M.** Peregrinatory flights of Lepidoptera in Costa Rica. Entomologist London **57** 1924 p. 45.

890.—**Ginter, O.** Seznam Moravskych Orthopter. I. [Moravian Orthoptera.] Casopis Prague **21** 1924 pp. 7–11.

891.—**Girault, A. A.** Notes and descriptions of Australian Chalcid Flies, I & II (Hymenoptera). Insec. Insc. Menst. Washington **12** 1924 pp. 1–9 & 172–176.

892.—**Girault, A. A.** The North American species of *Emersonopsis, Amestocharis, Euderus* and *Miromphalomyiia* (Hymenoptera, Chalcididae). Insec. Insc. Menst. Washington **12** 1924 pp. 93–95.

893.—**Glaser, R. W.** The effect of food on longevity and reproduction in flies. J. Exp. Zool. Philadephia **38** 1923 pp. 383–412.

894.—**Glendenning, R.** The elm-currant aphis (*Eriosoma ulmi* L.). Proc. Ent. Soc. Br. Columbia Vancouver no. **21** 1924 pp. 33–40 12 figs. [Hom.]

895.—**Glendenning, R.** Preliminary list of Aphididae of British Columbia. Proc. Br. Columbia Ent. Soc. Vancouver no. **21** 1924 pp. 40–43. [Hom.]

Glenn, P. A. *see* Flint, Chandler & Glenn.

896.—**Goding, F. W.** Synopsis of the Membracidae of Chile. Rev. chil. Hist. nat. Santiago **27** (1923) 1924 pp. 118–123. [Hem.]

897.—**Goetghebuer, M.** Notes additionnelles au Catalogue des Tipulidae de Belgique. Bull. Soc. ent. Belg. Brussels **6** 1924 pp. 83–85. [Dipt.]

898.—**Goetghebuer, M.** Note sur la biologie et la morphologie de *Liponeura belgica* Bischoff (Diptera: Blepharoceridae). Ann. Biol. lacustre Brussels **13** 1924 pp. 107–118 8 figs.

899.—**Goldschmidt, R.** Untersuchungen zur Genetik der geographischen Variation. I. Arch. mikr. Anat. Entw. Berlin **101** 1924 pp. 92–337, 154 figs. 5 pls. [Lep.]

900.—**Goldschmidt, R.** Erblichkeitsstudien an Schmetterlingen. IV. Weitere Untersuchungen über die Vererbung des Melanismus. Zs. indukt. Abstammgslehre Berlin **34** 1924 pp. 229–243 4 figs. [Lep.]

901.—Goldschmidt, R. Richtigstellung zu "Untersuchungen über Intersexualität. II." Zs. indukt. Abstammgslehre Berlin **34** 1924 p. 244.

902.—Goltz, v. d. Noch einiges über *Melitaea aurelia* Nick. Intern. ent. Zs. Guben **18** 1924 pp. 158–159. [Lep.]

903.—Good, H. G. Notes on the life history of *Prionocyphon limbatus* Lec. (Helodidae Coleoptera). J. New York Ent. Soc. **32** 1924 pp. 79–84 2 pls.

904.—Gorham, R. P. Notes on *Agriotes mancus*, Say, at Dartmouth, N.S. Proc. Acadian Ent. Soc. Truro **1923** 1924 pp. 69–72 1 pl. [Col.]

905.—Goudie, J. C. Notes on the Coleoptera of North-Western Victoria. X–XI. Vict. Nat. Melbourne **40** 1924 pp. 180–183 ; **41** 1924 pp. 25–30.

906.—Gouin, M. H. Sur quelques espèces ou variétés de Lépidoptères capturés par M. l'Abbé Bernier. Proc.-verb. Soc. linn. Bordeaux **75** 1923 pp. 209–211.

907.—Grabe, A. Wie oft häutet sich eine Zygaenen-Raupe ? Intern. ent. Zs. Guben **18** 1924 pp. 117–118. [Lep.]

908.—Grabe, A. Papier als Raupenfutter. Intern. ent. Zs. Guben **18** 1924 p. 122. [Lep.]

909.—Grabe, A. *Larentia bicolorata* Hufn. Intern. ent. Zs. Guben **18** 1924 pp. 136–138. [Lep.]

910.—Grandi, G. Intorno al ciclo biologico dell' *Aploneura lentisci* Pass. (Hemiptera - Homoptera - Aphidoidea). Nota preventiva. Atti Acc. Lincei Rome Rend. Classe Sci. fis. mat. nat. **30** 2 sem. 1921 pp. 107–110.

911.—Grandi, G. Un nuovo Agaonino dell' Isola Maurizio. Boll. Soc. ent. ital. Genoa **56** 1924 pp. 81–87 2 figs. [Hym.]

912.—Grassé, P. & **Vichet,** G. de. Sur la ponte des *Phaneroptera quadripuncta* Br. et *P. falcata* Scop. (Orth., Tettigonidae). Bull. Soc. ent. France Paris **1924** pp. 186–187.

913.—Graves, P. P. *Brenthis euphrosyne* in Ireland. Entomologist London **57** 1924 p. 198. [Lep.]

914.—Green, E. E. On some new species of Coccidae from various sources. Bull. Ent. Res. London **15** 1924 pp. 41–48 6 figs. [Hom.]

915.—Green, E. E. On the males of a species of *Monophlebus* from the Philippine Islands. Not. ent. Helsingfors **4** 1924 pp. 1–3 1 pl. [Hom.]

916.—Green, E. E. & **Laing,** F. Descriptions of some apparently new non-Diaspidine Coccidae. Bull. Ent. Res. London **14** 1924 pp. 415–419 6 figs. [Hom.]

917.—Greene, C. T. New species of *Mythicomyia* and its relationship with a new genus (*Diptera*). Proc. Ent. Soc. Washington **26** 1924 pp. 60–64 1 fig.

918.—Greene, C. T. Synopsis of the North American flies of the genus *Scellus*. Proc. U. S. Nat. Mus. Washington **65** 1924 art. 16 no. 2529 18 pp. 3 pls. [Dipt.]

Greenwood, W. *see* Veitch & Greenwood.

919.—Gregor, F. Z biologie rozmnožovani lunků (Trib. Tryphonini.) [Biology of reproduction in Parasitic Hymenoptera.] Casopis Prague **21** 1924 pp. 12–14 1 fig.

920.—Gridelli, E. Studi sul genere *Quedius* Steph. (Col. Staph.). Secondo contributo. Specie della regione paleartica. Mem. Soc. ent. ital. Genoa **3** 1924 pp. 5–112.

921.—Gridelli, E. Risultati scientifici della spedizione Ravasini-Lona in Albania. VII—Staphylinidae. Boll. Soc. ent. ital. Genoa **56** 1924 pp. 38–41. [Col.]

922.—Gridelli, E. Appunti sulle specie italiane del genere *Coryphium* Steph. (Coleopt. Staphyl.) Boll. Soc. ent. ital. Genoa **56** 1924 pp. 129–134.

923.—Gridelli, E. Specie italiane del genere *Mannerheimia* (Coleopt. Staph.) Boll. Soc. ent. ital. Genoa **56** 1924 pp. 134–138.

924.—Grönblom, T. Fjärilar med toenne generationer i Finland. Not. ent. Helsingfors **4** 1924 pp. 103–106. [Lep.]

925.—Grönblom, T. & Clayhills, T. H. Einige Berichtigungen und Nachträge zu den in W. Petersen's "Lepidopteren-Fauna von Estland" vorkommenden Angaben über finnische Macrolepidopteren. Not. ent. Helsingfors **4** 1924 pp. 99–103.

Grossman, W. *see* Rimsky-Korsakov & Grossman.

926.—Gruhl, K. Paarungsgewohnheiten der Dipteren. Zs. wiss. Zool. Leipzig **122** 1924 pp. 205–280 5 figs.

927.—Grützner, H. Zur Biologie des Hirschkäfers (*Lucanus cervus* L.). Ent. Jahrb. Leipzig **33–34** 1924 pp. 130–133. [Col.]

928.—Gruvel, A. Observations zoologiques faites au cours d'un voyage en Mauritanie. 1.—Transport d'une Piéride des Canaries à Dakar. Rev. Hist. nat. app. Paris (1) **5** 1924 pp. 73–74. [Lep.]

929.—de Gryse, J. J. & Treherne, R. C. The male genital armature of the Thysanoptera. Canad. Ent. Orillia **56** 1924 pp. 177–182 1 pl.

930.—Guérin, E. Une nouvelle espèce de *Polybothris* de Madagascar (Col., Buprestidae). Misc. ent. Castanet Tolosan **28** 1924 p. 41.

931.—Gunder, J. D. Several new aberrant Lepidoptera (Rhopalocera) from California. Ent. News Philadelphia **35** 1924 pp. 153–158 1 pl.

932.—Gundermann, v. Verzeichnis Thüringer Dipteren. III. Cyclorrhapha aschiza. Syrphidae. Intern. ent. Zs. Guben **18** 1924 pp. 109–113, 123–126, 134–136.

933.—Gurney, G. H. An entomological journey to Spain in 1922. Entomologist London **57** 1924 pp. 103–109, 124–129, 155–159.

934.—Guyton, T. L. A taxonomic, ecologic and economic study of Ohio Aphididae. Ohio J. Sci. Columbus **24** 1924 pp. 1–30. [Hom.]

935.—Györffy, E. von. Beiträge zur Kenntnis der Gattung *Apion* Hrbst. (Coleopt. Curculionidae). I. Beschreibungen neuer Arten. II. Synonymische Bemerkungen. Folia ent. hungarica Budapest **1** 1924 pp. 25–28.

Haase, J. *see* Binder & Haase.

936.—Habermehl, H. Neue englische Ichneumoniden nebst Bemerkungen über *Ichneumon macrocerus* E. G. Thoms. ♀, *Cratichneumon forsteri* Wesm. ♀ u. *Grypocentrus cinctellus* Ruthe ♂ (Hym.). Konowia Vienna **2** 1923 pp. 34–43.

937.—Habermehl, H. Beitrag zur Kenntnis der primären und sekundären Schmarotzerwespen der Kieferneule (*Panolis flammea* Schiff. = *P. griseovariegata* Goeze) (Hym.). D. ent. Zs. Berlin **1924** pp. 183–184. [Hym.]

938.—Hacker, H. Field notes on *Platybrachys*, etc. (Homoptera). Mem. Queensland Mus. Brisbane **8** 1924 pp. 37–41 4 pls.

939.—Hacker, H. The early stages of *Danaida affinis* Fabr. Mem. Queensland Mus. Brisbane **8** 1924 pp. 43–44 1 pl. [Lep.]

940.—Haga, J. Aanteekening omtrent muskieten (II.). Geneesk. Tijdschr. Ned.-Indië Batavia **64** 1924 pp. 815–834. [Dipt.]

Haga, J. *see* Brug & Haga.

941.—Haines, F. H. The distribution of the Order Hymenoptera (Insecta) in Dorset with suggestions as to the limiting causes. Proc. Dorset Nat. Hist. F. Cl. Dorchester **43** (1922) 1923 pp. 65–107.

942.—Hale, H. M. Studies in Australian aquatic Hemiptera. No. III. Rec. S. Aust. Mus. Adelaide **2** 1924 pp. 503–520 3 pls. 2 figs.

943.—Hale, H. M. Notes on eggs, habits and migration of some Australian aquatic bugs (Corixidae and Notonectidae). S. Aus. Nat. Adelaide **5** 1924 pp. 133–135 2 pls. [Hem.]

944.—Hall, A. H. Descriptions of two new forms of *Chlosyne* (Lep. Nymphalidae). Entomologist London **57** 1924 pp. 241–242 4 figs.

945.—Hall, G. C. Notes on *Polygonia j-album, Cercyonis alope, Phyciodes tharos, Heodes epixanthe* and *Euphydryas gilletti.* J. New York Ent. Soc. **32** 1924 pp. 109–111. [Lep.]

946.—Hall, W. J. Four new species of Coccidae from Egypt. Min. Agric. Egypt Cairo Tech. & Sci. Serv. Bull. **46** 1924 8 pp. 6 pls. [Hom.]

947.—Hamilton, C. C. The biology and control of the chrysanthemum midge (*Diarthronomyia hypogaea* F. Low). Maryland Agric. Expt. Sta. College Park Md. Bull. **269** 1924 50 pp. 9 figs. 1 pl. [Dipt.]

948.—Hamlin, J. C. A review of the genus *Chelinidea* (Hemiptera-Heteroptera) with biological data. Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 193–208.

949.—Hamlin, J. C. New cactus bugs of the genus *Chelinidea* (Hemiptera). Proc. R. Soc. Queensland 1923 Brisbane **35** 1924 pp. 43–45.

950.—Hampson, G. F. Descriptions of new genera and species of Trinidad and other S. American Noctuidae. Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 425–454. [Lep.]

951.—Hampson, G. F. Descriptions of two new genera and two new species of Ophiderinae (Noctuidae). Entomologist London **57** 1924 pp. 182–184. [Lep.]

952.—Handschin, E. Oekologische und biologische Beobachtungen an der Collembolenfauna des schweizerischen Nationalparkes. Verh. Natf. Ges. Basel **35** 1924 2 Teil pp. 71–101.

953.—Handschin, E. Neue myrmecophile und termitophile Collembolenformen aus Süd-Amerika. N. Beitr. syst. Insektenk. Berlin **3** 1924 pp. 13–19 & 21–28 8 figs.

954.—Hanna, G. H. Insects in the Californian tar traps. Science New York **59** 1924 p. 555.

955.—Hänsel, S. Beitrag zur Kenntnis der Biologie des Getreidehähnchens *Lema cyanella* Lin. Zts. wiss. Insektenbiol. Berlin **19** 1924 pp. 27–29 7 figs. [Col.]

956.—Hansen, V. Billeslaegten *Meligethes* Steph. Ent. Medd., Copenhagen **14** 1924 pp. 339–373. [Col.]

957.—Hardy, G. H. On the synonymy of Australian flies belonging to the genus *Actina* (Stratiomyiidae). Proc. R. Soc. Queensland Brisbane **36** 1924 pp. 38–40. [Dipt.]

958.—Hardy, G. H. Notes on and the synonymy of *Xanthoberis silicea* White (Diptera, Stratiomyiidae). Rec. S. Aust. Mus. Adelaide **2** 1924 pp. 553–554 1 fig.

959.—Hardy, G. H. A revision of the Australian Chiromyzini (Stratiomyiidae Diptera). Proc. Linn. Soc N.S.W. Sydney **49** 1924 pp. 360–370 17 figs.

960.—Hardy, G. H. Notes on Australian Bombyliidae, mostly from the manuscript papers of the late Arthur White. Pap. & Proc. R. Soc. Tasmania Hobart **1923** 1924 pp. 72–86. [Dipt.]

961.—Harnisch, O. Studien zur Oekologie der Moorfauna. Biol. Zentralbl. Leipzig **44** 1924 pp. 110–127.

Harris, R. C. *see* Cockerell & Harris.

962.—Harris, R. G. Sex of adult Cecidomyiidae (*Oligarces* sp.) arising from larvae produced by paedogenesis. Psyche Boston **31** 1924 pp. 148–154.

963.—Harrison, J. W. H. New and rare British Cecidomyiidae. Entomologist London **57** 1924 pp. 6–9. [Dipt.]

964.—Harrison, J. W. H. & **Carter,** W. The British races of *Aricia medon* (Esper) with special reference to the areas in which they overlap. Trans. Nat. Hist. Soc. Newcastle **6** 1924 pp. 89–106 1 pl. [Lep.]

Harrison, J. W. H. *see* Bagnall & Harrison.

965.—Hartig, F. G. Neubeschreibungen aus Südtirol. Ent. Rdsch. Stuttgart **41** 1924 pp. 42–43, 45–46. [Lep.]

966.—Hartwell, R. A. A study of the olfactory sense of Termites. Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 131–160 2 tables 2 pls.

967.—Harvey, E. N. Studies on bio-luminescence. XVI. What determines the colour of the light of luminous animals? Amer. J. Physiol. Baltimore **70** 1924 pp. 619–625. [Col.]

968.—Hase, A. Zur Kenntnis wirtschaftlich wichtiger Tierformen. I. Über den Stechund Legeakt, sowie über den Wirtswechsel von *Lariophagus distinguendus* (Chalcididae, Pteromalini). Naturwissenschaften Berlin **12** 1924 pp. 377–384 3 figs. [Hym.]

969.—**Hase,** A. Die Schlupfwespen als Giftiere. Biol. Zentralbl. Leipzig **44** 1924 pp. 209–243 3 figs. 1 table. [Hym.]

970.—**Hase,** A. Ueber die Stiche der Wasserwanze *Notonecta glauca* L. Zool. Anz. Leipzig **59** 1924 pp. 143–155. [Hem.]

971.—**Hase,** A. Untersuchungen und Beobachtungen über die Gespinste und über die Spinntätigkeit der Mehlmottenraupen, *Ephestia kuehniella* Zell. Arb. Biol. Reichsanst. Land- u. Forstw. Berlin **13** 1924 pp. 79–128 10 plates. [Lep.]

972.—**Hasebroek,** K. Neues zur Entwicklung der Schmetterlingsfärbung. Intern. ent. Zs. Guben **18** 1924 pp. 182–185 2 figs. [Lep.]

973.—**Hauder,** F. Zur Geschichte der Lepidopterologie in Oberösterreich. Jahr. Ber. oberöst. Musealver. 1922–23 Linz **80** 1924 pp. 243–264.

974.—**Hauder,** F. Nachtrag zur Mikrolepidopteren-Fauna Oberösterreichs. Jahr. Ber. oberöst. Musealver. 1922–23 Linz **80** 1924 pp. 267–294. [Lep.]

975.—**Haughton,** S. H. The fauna and stratigraphy of the Stormberg Series in South and Central Africa. Ann. S. Afr. Mus. Cape Town **12** 1924 pp. 323–497.

976.—**Haupt,** H. Das Problem der Schlupfwespe. Ent. Jahrb. Leipzig **31** 1922 pp. 136–142 3 figs. [Hym.]

977.—**Haupt,** H. Die Gattung *Huechys* Am. et Serv. (Homopt.). D. ent. Zs. Berlin **1924** pp. 201–225 3 figs.

978.—**Haupt,** H. Alte und neue Homoptera Mitteleuropas. Konowia Vienna **3** 1924 pp. 285–300 2 figs.

979.—**Hauser,** G. Neue *Apotomopterus*-Arten. Soc. ent. Stuttgart **39** 1924 pp. 1–2, 6–7. [Col.]

980.—**Hawker-Smith,** W. Further records of Lepidoptera from the Witley district of Surrey. Ent. Rec. London **36** 1924 pp. 75–78.

981.—**Hay,** O. P. On the status of privately issued papers on systematic zoology. Proc. Biol. Soc. Washington **37** 1924 pp. 109–112.

982.—**Hayes,** W. P. & **McColloch,** J. W. A new species of *Anomala* (Coleop. Scarabaeidae). Ent. News Philadelphia **35** 1924 pp. 138–140.

983.—**Hayes,** W. P. & **McColloch,** J. W. The biology of *Anomala kansana* (Scarabaeidae, Coleop.). J. Econ. Ent. Geneva N.Y. **17** 1924 pp. 589–594 1 fig. 4 tables.

984.—**Hebard,** M. Studies in the Acrididae of Panama (Orthoptera). Trans. Amer. Ent. Soc. Philadelphia **50** 1924 pp. 75–140 3 pls.

985.—**Hebard,** M. The group Scyllinae (Orthoptera, Acrididae, Acridinae) as found in North America, with records and data on its occurrence in the United States. Trans. Amer. Ent. Soc. Philadelphia **50** 1924 pp. 157–161 1 pl.

986.—**Hebard,** M. Studies in Japanese Acrididae (Orthoptera). Trans. Amer. Ent. Soc. Philadelphia **50** 1924 pp. 209–224 2 figs.

987.—**Hebard,** M. A revision of the genus *Taeniopoda* (Orthoptera, Acrididae, Cyrtacanthacrinae). Trans. Amer. Ent. Soc. Philadelphia **50** 1924 pp. 253–274.

988.—**Hebard,** M. Studies in the Dermaptera and Orthoptera of Ecuador. Proc. Acad. Nat. Sci. Philadelphia **76** 1924 pp. 109–248 6 pls.

989.—**Hecht,** O. Embryonalentwicklung und Symbiose bei *Camponotus ligniperda*. Zs. wiss. Zool. Leipzig **122** 1924 pp. 173–204 28 figs. [Hym.]

990.—**Heckel,** —. Sind *Nemoraea xanthogastra* Rond., *amoena* Meig. und *analis* Macqu. wirklich verschiedene Arten ? Intern. ent. Zs. Guben **18** 1924 p. 59. [Dipt.]

991.—**Hedicke,** H. & **Hering,** M. Vorschläge für eine Terminologie der Blattminen. D. ent. Zs. Berlin **1924** pp. 185–194 13 figs.

992.—**Heikertinger,** F. Methode zur Ermittlung der Nährpflanzen von Insekten. Handb. biol. Arbeitsmeth. Abt. ix **1** 1922 Lief. 71 pp. 433–438.

993.—**Heikertinger,** F. Ueber das Wesen des Kontinuitätsprinzips in der Nomenklatur. Verh. zool.-bot. Ges. Wien **73** (1923) 1924 pp. (182)–(186).

994.—Heikertinger, F. *Otiorrhynchus crataegi* Germ. und *mastix* Ol., zwei Zierstrauchschädlinge der Wiener Gärten. Verh. zool.-bot. Ges. Wien **73** (1923) 1924 pp. 119–128 8 figs. [Col.]

995.—Heikertinger, F. Wie baut man eine Bestimmungstabelle ? Wiener ent. Ztg. Vienna **41** 1924 pp. 141–158.

996.—Heikertinger, F. Die Halticinengenera der Palaearktis. und Nearktis. Bestimmungstabellen (Monographie der palaearktischen Halticinen : Systematischer Teil.—Zweites Stück.) Koleopt. Rundsch. Vienna **11** 1924 pp. 25–48 15 figs. [Col.]

997.—Heikertinger, F. Erwiderung an H. H. Karny. Ent. Mitt. Berlin **13** 1924 pp. 109–110.

998.—Heikertinger, F. Resultate fünfzehnjähriger Untersuchungen über die Nahrungspflanzen einheimischer Halticinen (Monographie der paläarktischen Halticinen. Biologischer Teil. Erstes Stück). Ent. Bl. Berlin **20** 1924 pp. 214–224. [Col.]

999.—Heikertinger, F. Ueber die Verwendbarkeit des " freien Attributs " als Varietätenbezeichnung bei Aufstellung entomologischer Sammlungen. Zs. angew. Ent. Berlin **10** 1924 pp. 480–485.

Hein, S. A. A. *see* Arendsen Hein, S. A.

1000.—Heinrich, C. North American Eucosminae, notes and new species (Lepidoptera). J. Washington Acad. Sci. **14** 1924 pp. 385–393.

1001.—Heinrich, R. Beitrag zur Gross-schmetterlingsfauna von Reichenhall, Eisenstein und Viechtach ; nebst biologischen Bemerkungen über einige, Arten (Lep.). D. ent. Zs. Berlin **1924** pp. 361–371.

1002.—Heinzel, G. Der Bau der Schmetterlingsschuppe. Intern. ent. Zs. Guben **18** 1924 pp. 5–7, 14–16. [Lep.]

1003.—Heinzel, G. Die Praxis des Köderns! Intern. ent. Zs. Guben **18** 1924 pp. 209–212. [Lep.]

1004.—Hellén, W. Uebersicht der finnländischen Chalcidinen und Perilampinen (Hym.). Not. ent. Helsingfors **4** 1924 pp. 9–14.

1005.—Hellén, W. Koleopterologische Mitteilungen aus Finland. V. Not. ent. Helsingfors **4** 1924 pp. 87–92.

1006.—Heller, J. Sur la transformation des matières albuminoïdes pendant la métamorphose des Lépidoptères : *Deilephila euphorbiae.* C.R. Soc. Biol. Paris **90** 1924 pp. 1360–1361.

1007.—Heller, K. M. 3. Bestimmungsschlüssel aussereuropäischer Käfer. Cerambycidae, Molorchini : genera *Epania* und *Merionoeda.* Ent. Blätter Berlin **20** 1924 pp. 26–34. [Col.]

1008.—Heller, K. M. Ein neuer *Leptinopterus* (Col. Lucanidae). Ent. Mitt. Berlin **13** 1924 pp. 63–64 1 fig.

1009.—Heller, K. M. Neue, vorwiegend philippinische Bockkäfer. Ent. Mitt. Berlin **13** 1924 pp. 195–214 1 pl. [Col.]

1010.—Heller, K. M. Neue philippinische Bock- und Rüsselkäfer aus der Sammlung von Prof. C. F. Baker. Wiener ent. Ztg. Vienna **41** 1924 pp. 163–180 1 fig. [Col.]

1011.—Heller, K. M. New Philippine Zygopinae, Calandrinae, and Cryptoderminae (Curculionidae, Coleoptera). Phil. J. Sci. Manila **25** 1924 pp. 287–309 1 pl.

1012.—Hellweger, M. Die Grossschmetterlinge Nordtirols. Brixen a. E. 1914. Jahresber. des Vicentiums Brixen **36** & **37**, separate pp. 1–364. [Not seen.] [Lep.]

1013.—Hendel, F. Neue europäische *Melanagromyza*-Arten (Dipt.). (5. Beitrag zur Blattminenkunde Europas.) Konowia Vienna **2** 1923 pp. 142–145.

1014.—Hendel, F. Die paläarktischen Muscidae acalyptratae Girschn. (= Haplostomata Frey) nach ihren Familien und Gattungen. II. Die Gattungen. Konowia Vienna **2** 1923 pp. 203–215. [Dipt.]

1015.—Hendel, F. Acht neue europäische Agromyziden (Dipt.). 6. Beitrag zur Blattminenkunde Europas. Konowia Vienna **3** 1924 pp. 140–148.

1016.—Hendel, F. Ueber das Genus *Parallelomma* Beck. und seine Verwandten in Europa. (Dipt. Cordyl.) (7. Beitrag zur Blattminenkunde Europas.) Ent. Mitt. Berlin **13** 1924 pp. 82–84.

1017.—Henderson, W. W. A taxonomic and ecological study of the species of the subfamily Oedipodinae (Orthoptera-Acrididae) found in Utah, with a summary of world distribution and a list of Orthoptera recorded for the State. Utah Agric. Expt. Sta. Logan Bull. **191** 1924 150 pp. 6 pls.

1018.—Herbst, P. Die Blütenbestäuber von *Phrygilanthus tetrandrus* Eichl. Zts. wiss. Insektenbiol. Berlin **19** 1924 pp. 16–19.

1019.—Hering, M. Zur Kenntnis der Blattminenfauna des Banats. I. II. Zts. wiss. Insektenbiol. Berlin **19** 1924 pp. 1–15, 31–41 4 figs.

1020.—Hering, M. Das Lepidopteren-Genus *Cosmopteryx* Hb. Ent. Jahrb. Leipzig **33-34** 1924 pp. 109–116 1 pl.

1021.—Hering, M. Beiträge zur Kenntnis der Zygaeniden (Lep.). ii. Neue und wenig bekannt Zygaeniden von Amerika. D. ent. Zs. Berlin **1924** pp. 265–277.

1022.—Hering, M. Minenstudien. iv. Zs. Morphol. u. Oekologie der Tiere Berlin **2** 1924 pp. 217–250 16 figs.

1023.—Hering, M. Anatomischer Befund eines zwitters von *Argynnis paphia* L. Zool. Anz. Leipzig **58** 1924 pp. 74–76.

1024.—Hering, M. Beitrag zur Kenntnis der Microlepidopteren-Fauna Finlands. Not. ent. Helsingfors **4** 1924 pp. 75–84 13 figs.

Hering, M. *see* Hedicke & Hering.

1025.—Herrera, M. Breve monografia del *Megasoma elephas* Gemm. Dirección de Estudios biologicos Mexico **1922** 21 pp. 9 figs. 4 pls. [Col.]

1026.—Herrick, G. W. The genus *Limothrips* (Thysanoptera) in America. Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 231–232 3 figs.

1027.—Hersh, R. K. The effect of temperature upon the full-eyed race of *Drosophila.* J. Exp. Zool. Philadelphia **39** 1924 pp. 43–53. [Dipt.]

1028.—Hersh, A. H. The effect of temperature upon the heterozygotes in the bar series of *Drosophila.* J. Exp. Zool. Philadelphia **39** 1924 pp. 55–71 4 figs. [Dipt.]

1029.—Hertwig, R. Ueber den Einfluss der Ueberreife der Eier auf das Geschlechtsverhältnis von Fröschen und Schmetterlingen. SitzBer. Ak. Wiss. München **1921** 1922 pp. 269–294. [Lep.]

1030.—Hervé-Bazin, J. Notes sur les Syrphides de l'Inde (Diptères). Remarques et notes synonymiques sur l'ouvrage de M. E. Brunetti: "The Fauna of British India, Diptera, Vol. III, Syrphidae, etc." Ann. Soc. ent. France Paris **92** (1923) 1924 pp. 289–299.

1031.—Herwerden, M. A. van. Einige Bemerkungen über das mikroskopische Bild der lebenden Zelle. Anat. Anz. Jena **59** 1924 pp. 93–96. [Dipt.]

1032.—Hetschko, A. Zweiter Nachtrag zum Verzeichnis der Schriften von Edmund Reitter. Wiener ent. Ztg. Vienna **41** 1924 pp. 158–159.

1033.—Hetschko, A. Liste der von Edm. Reitter in den Jahren 1916 bis 1920 neu beschriebenen Coleopteren. Wiener ent. Ztg. Vienna **41** 1924 pp. 159–162.

1034.—Heuer, A. Eine neue Narkoseform von *Melitaea didyma* O. Intern. ent. Zs. Guben **17** 1924 pp. 168–169. [Lep.]

1035.—Hewer, T. F. The intelligence and sense-organs of Dragonflies. Ann. Rep. Proc. Bristol Nat. Soc. (4) **6** (1923) 1924 pp. 38–45. [Odon.]

1036.—van der Heyde, H. C. Quelques expériences sur l'odorat et la faculté d'apprendre des fourmis. Arch. néerl. Sci. Soc. holl. Haarlem **9** 1924 p. 114. [Hym.]

1037.—Heymes, P. Kleine Betrachtungen über die Futterpflanzen von verschiedenen *Ceuthorrhynchus*-Arten. Ent. Blätter Berlin **20** 1924 pp. 59–60. [Col.]

1038.—Heymons, R. Ein Beitrag zur Kenntnis südafrikanischer Borkenkäfer. Mitt. zool. Mus. Berlin **10** 1921 pp. 97–114 9 figs. [Col.]

1039.—Higgins, L. G. On the Ethiopian species of the genus *Hesperia* (Lep. Rhop.) with descriptions of two new species. Trans. Ent. Soc. London **1924** pp. 64–120 4 pls.

Hill, C. C. *see* Leiby & Hill.

1040.—Hilton, W. A. Afferent and efferent pathways in an abdominal segment of an insect. J. Comp. Neur. Philadelphia **36** 1924 pp. 299–307 8 figs. [Col.]

1041.—Hine, J. S. The North American species of the genus *Meromacrus* with one new species (Diptera, Syrphidae). Bull. Brooklyn Ent. Soc. **19** 1924 pp. 20–23.

1042.—Hingston, R. W. G. The red ant. Part III. Special senses and instincts. J. Bombay Nat. Hist. Soc. **29** 1924 pp. 908–920 1 fig. [Hym.]

1043.—Hock, K. Ueber Aberrationen bei Schmetterlingen. Ent. Rdsch. Stuttgart **41** 1924 pp. 9, 13–14. [Lep.]

1044.—Hofeneder, K. *Stylops* in copula. Verh. zool.-bot. Ges. Wien **73** (1923) 1924 pp. 128–134 2 figs. [Col.]

1045.—Höfer, C. Aberrationen. Verh. zool.-bot. Ges. Wien **73** (1923) 1924 pp. (192)–(196) 4 figs. [Lep.]

1046.—Höfer, C. The variation in *Larentia* (*Thera*) *variata*, Schiff. Ent. Rec. London **36** 1924 pp. 39–41, 88–90, 119–120, 151–154, 165–167. [Lep.]

1047.—Hoffman, W. A. The presence of an eversible gland in a midge. Proc. Ent. Soc. Washington **26** 1924 p. 144 1 fig. [Dipt.]

1048.—Hoffman, W. A. *Stilobezzia mallochi* and *Atrichopogon gilva* (Dipt.: Chironomidae). Ent. News Philadelphia **35** 1924 pp. 282–284.

1049.—Hoffman, W. E. Biological notes on *Lethocerus americanus* (Leidy). Psyche Boston **31** 1924 pp. 175–183. [Hem.]

1050.—Hoffman, W. E. The life-histories of three species of Gerrids (Heteroptera, Gerridae). Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 419–430.

1051.—Hoke, G. The anatomy of the head and mouth-parts of Plecoptera. J. Morph. Philadelphia **38** 1924 pp. 347–385 6 pls.

Holbrook, J. E. R. *see* Mosher & Holbrook.

1052.—Holdhaus, K. Das Tyrrhenisproblem. Zoogeographische Untersuchungen unter besonderer Berücksichtigung der Koleopteren. Ann. Nat.-hist. Mus. Wien **37** 1924 pp. 1–200 1 fig.

1053.—Holland, W. J. The family name of the lace-bugs (Tingitidae). Ann. Ent. Soc. America Columbus **17** 1924 pp. 95–96. [Hem.]

Holloway, T. E. *see* Bynum & Holloway.

1054.—Homann, H. Der Vertikalilluminator als Augenspiegel bei kleinen Augen. Biol. Zentralbl. Leipzig **44** 1924 pp. 582–591 7 figs.

1055.—Hood, J. D. A new *Ankothrips* (Thysanoptera) from New Mexico. Bull. Brooklyn Ent. Soc. **19** 1924 pp. 66–68.

1056.—Hood, J. D. New Thysanoptera from the United States. Ent. News, Philadelphia **35** 1924 pp. 312–317.

1057.—Hood, J. D. On some new Phloeothripidae (Thysanoptera) from the Transvaal. Psyche Boston **31** 1924 pp. 293–301.

1058.—Hood, J. D. A new *Sericothrips* (Thysanoptera) injurious to cotton. Canad. Ent. Orillia **56** 1924 pp. 149–150.

1059.—Hormuzaki, C. Ueber Melitaeen aus Rumänien und Beschreibung einer neuen Form. N. Beiträge system. Insektenk. Berlin **3** 1924 pp. 9–10 1 fig. [Lep.]

1060.—Horn, W. Ueber die marokkanische *Cicindela coquereli* Fairm. und ihre Aehnlichkeit mit dem kapensischen Relikt: *Cicindela quadriguttata* Wdm. (Col.). Ent. Mitt. Berlin **13** 1924 pp. 215–219 10 figs.

1061.—Horn, W. Les Cicindélides des "Vaccarias" du Rio Vaccaria, dans le Matto Grosso (Brésil) et leur termitophilie. Bul. Soc. Stiinte Cluj **2** 1924 Sci. Nat. pp. 46–48. [Col.]

1062.—Horn, W. On new and old oriental Cicindelidae. Mem. Dept. Agric. India Calcutta **8** 1924 pp. 89–91. [Col.]

1063.—Horn, W. Three new Cicindelidae from the Philippines. Philipp. J. Sci. Manila **24** 1924 pp. 87–89. [Col.]

1064.—Horn, W. Three new *Dromica* species (Coleoptera) from Rhodesia. Proc. Rhod. Sci. Ass. Bulawayo **23** 1924–1925 pp. 23–24.

1065.—Horváth, G. Fauna Regni Hungariae Hemiptera. Budapest 1918 pp. 5–64.

1066.—Horváth, G. Miridarum genus novum palaearcticum. Folia ent. hungarica Budapest **1** 1924 pp. 8–9. [Hem.]

1067.—Horváth, G. Species aegyptiacae generis *Stenolaemus* Sign. (Hemipt.). Bull. Soc. R. ent. Egypte, Cairo **1924** pp. 84–90 2 figs.

1068.—Horváth, G. Description d'un Fulgoride nouveau des dattiers (Hémipt.). Bull. Soc. R. ent. Egypte Cairo **1924** pp. 91–93.

1069.—Houlbert, C. Thysanoures, Dermaptères et Orthoptères de France et de la Faune européenne. I. Paris, Doin 1924 382 pp. 9 pls. 87 figs.

1070.—Hubault, E. Sur la présence de *Liponeura cinerascens* Loew et de *L. brevirostris* Loew dans la haute vallée de la Meurthe. Adaptation de ces Diptères Blépharocérides à la vie torrenticole. C. R. Acad. Sci. Paris **179** 1924 pp. 713–716.

1071.—Hubault, E. Recherches sur la structure intime des étuis des larves de certains Trichoptères. Ann. Biol. lacustre Brussels **13** 1924 pp. 99–105 1 pl. 7 figs.

Hubbell, T. H. *see* Watson & Hubbell.

1072.—Hudson, G. V. Illustrated life-histories of New Zealand insects: No. 2. Trans. N. Z. Inst. Wellington **55** 1924 pp. 341–343 1 col. pl.

1073.—Huettner, A. F. Maturation and fertilization in *Drosophila melanogaster*. J. Morph. Philadelphia **39** 1924 pp. 249–259 3 pls. 1 fig. [Dipt.]

1074.—Hull, F. M. *Milesia* in North America (Dipt.: Syrphidae). Ent. News Philadelphia **35** 1924 pp. 280–282.

1075.—Hulstaert, G. Rhopalocères nouveaux des Indes hollandaises. Ann. Soc. ent. Belg. Brussels **64** 1924 pp. 73–81. [Lep.]

1076.—Hulstaert, G. Hétérocères indoaustraliens nouveaux. Ann. Soc. ent. Belg. Brussels **64** 1924 pp. 85–101. [Lep.]

1077.—Hulstaert, G. Hétérocères nouveaux du Brésil. Ann. Soc. ent. Belg. Brussels **64** 1924 pp. 105–108.

1078.—Hulstaert, G. Pieridae nouveaux de l'Afrique centrale. Rev. zool. afr. Brussels **12** 1924 pp. 90–99. [Lep.]

1079.—Hulstaert, G. Lycaenidae nouveaux des Collections du Musée du Congo Belge. Rev. zool. afr. Brussels **12** 1924 pp. 112–122, 173–194. [Lep.]

1080.—Hulstaert, G. Notodontidae nouveaux du Congo Belge. Rev. zool. afr. Brussels **12** 1924 pp. 398–404. [Lep.]

1081.—Hulstaert, G. Rhopalocères nouveaux du Congo Belge. Rev. zool. afr. Brussels **12** 1924 pp. 476–481.

1082.—Hulstaert, G. New Indo-Australian Noctuidae. Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 97–127. [Lep.]

1083.—Hulstaert, G. New moths from New Guinea, Kei, and Tenimber. Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 127–139. [Lep.]

1084.—Hungerford, H. B. Stridulation of *Buenoa limnocastoris* Hungerford and systematic notes on the *Buenoa* of the Douglas Lake Region of Michigan, with the description of a new form (Notonectidae-Hemiptera). Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 223–226 1 pl.

1085.—Hungerford, H. B. A second new *Mesovelia* from the Douglas Lake, Michigan Region (Hemiptera-Mesoveliidae). Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 453–456 1 fig.

1086.—Hungerford, H. B. A new *Mesovelia* with some biological notes regarding it (Hemiptera-Mesoveliidae). Canad. Ent. Orillia **56** 1924 pp. 142–144.

1087.—Hussey, R. F. A new North American species of *Microvelia* (Hem.). Bull. Brooklyn Ent. Soc. **19** 1924 pp. 164–165.

1088.—Hustache, A. Curculionidae. Voy. Babault Afrique or. angl. Paris **1921** pp. 1–75 2 pls.

1089.—Hustache, A. Nouveaux Curculionides d'Europe (Col.). Bull. Soc. ent. France Paris **1923** 1924 pp. 246–249 2 figs.

1090.—Hustache, A. Nouveaux *Mecysmoderes* (Col. Curculionidae). Bull. Soc. ent. France Paris **1924** pp. 57–61.

1091.—Hustache, A. Curculionidae gallo-rhénans. Ann. Soc. ent. France Paris **93** 1924 pp. 31–124 36 figs.

1092.—Hustache, A. Curculionidae de la faune franco-rhénane. I. Ceuthorrhynchini. Misc. ent. Castanet-Tolosan **27-28** 1924 pp. 143–238 sep. pag. [Col.]

1093.—Hustache, A. Curculionides nouveaux du Congo. Rev. zool. afr. Brussels **12** 1924 pp. 43–89, 353–396. [Col.]

1094.—Hutchings, C. B. A study of the pupal case of *Prionoxystus macmurtrei*. 54th Ann. Rept. Ontario Ent. Soc. Toronto **1923** 1924 pp. 63–67 1 pl. [Lep.]

1095.—Hutchinson, G. E. Contributions towards a list of the Insect Fauna of the South Ebudes. iv. The Hemiptera (Rhynchota). Scot. Nat. Edinburgh **1924** pp. 21–27.

1096.—Hutson, J. C. & Austin, G. D. Notes on the habits and life-history of the Indian glow-worm. Ceylon Dept. Agric. Peradeniya Bull. **69** 1924 15 pp. 1 pl. [Col.]

1097.—Hyde, R. R. Inbreeding, outbreeding and selection with *Drosophila melanogaster*. J. Exp. Zool. Philadelphia **40** 1924 pp. 181–215 8 diagrams. [Dipt.]

1098.—Illidge, R. Insects and birds observed during Cedar Creek and D'Aguilar Range excursion. Queensl. Nat. Brisbane **4** 1923 pp. 34–35.

1099.—Illidge, R. Notes on the Nymphalid butterfly *Hypolimnas bolina nerina* Fabr. Queensl. Nat. Brisbane **4** 1923 pp. 36–38 1 pl. [Lep.]

1100.—Illingworth, J. F. Early references to Hawaiian Entomology. Bern. P. Bish. Mus. Honolulu Bull. **2** 1923 pp. 1–63.

1101.—Illingworth, J. F. The small banana weevil (Coleoptera). Proc. Hawaiian Ent. Soc. Honolulu **5** 1924 pp. 375–376.

1102.—Iltcheff, D. Contribution à l'étude de la faune des papillons des Rhodopes centrales. Trav. Soc. bulgar. Sci. nat. Sofia **7** 1915 pp. 161–169. [In Bulgarian ; summary in French.]

1103.—Iltcheff, D. Contribution à l'étude de la faune des papillons dans la région de la ville d'Aïtos. Trav. Soc. bulgar. Sci. nat. Sofia **10** 1923 pp. 49–53. [In Bulgarian ; summary in French.]

1104.—Iltcheff, D. Contribution à l'étude de la faune des papillons de la montagne de Strandja. Trav. Soc. bulgar. Sci. nat., Sofia **11** 1924 pp. 167–183. [In Bulgarian ; summary in French.]

Iltcheff, D. *see* Buresch & Iltcheff.

1105.—Ingram, A. & Macfie, J. W. S. Notes on some African Ceratopogonine species of the genus *Lasiohelea*. Ann. Trop. Med. & Parasit. Liverpool **18** 1924 pp. 377–392 1 pl. 3 figs. [Dipt.]

1106.—Ingram, A. & Macfie, J. W. S. Notes on some African Ceratopogonine species of the genus *Forcipomyia*. Ann. Trop. Med. & Parasit. Liverpool **18** 1924 pp. 533–593 17 figs. [Dipt.]

1107.—Ingram, A. & Macfie, J. W. S. A further note on African Ceratopogoninae. II. Bull. Ent. Res. London **15** 1924 pp. 179–184 3 figs. [Dipt.]

1108.—International Commission on Zoological Nomenclature. Opinions 79 & 81. Smithsonian Misc. Collect. Washington **73** no. 2 1924 pp. 15–16 & 19–32.

1109.—Isaac, P. V. A practical and simple method for rearing Tabanid larvae. Mem. Dept. Agric. India, Calcutta **8** 1924 pp. 53–57 2 pls. [Dipt.]

1110.—Isaac, P. V. The number of moults in Tabanid larvae. Mem. Dept Agric. India, Calcutta **8** 1924 pp. 57–59 1 pl. [Dipt.]

1111.—Isaac, P. V. The life-history of *Tabanus crassus* Wlk. and the identity of the female of the species. Mem. Dept. Agric. India Calcutta **8** 1924 pp. 59–62 1 pl. [Dipt.]

1112.—Ischreyt, G. Zur Kenntnis der morphologischen Artmerkmale des Koleopteren genus *Donacia.* Zool. Anz. Leipzig **58** 1924 pp. 36–43 2 figs. [Col.]

1113.—Ishii, T. Observations on the Hymenopterous parasites of *Ceroplastes rubens,* Mask., with descriptions of new genera and species of the subfamily Encyrtinae. Dept. Agric. & Comm. Japan Imp. Pl. Quar. Sta. Yokohama Bull. **3** 1923 (reprinted 1924) pp. 69–114 5 pls.

1114.—Ishimori, N. Distribution of the malpighian vessels in the wall of the rectum of Lepidopterous larvae. Ann. Ent. Soc. America, Columbus **17** 1924 pp. 75–82 8 figs. 2 pls.

1115.—Ishimori, N. & Metalnikov, S. Immunisation de la chenille de *Galleria mellonella* par des substances non spécifiques. C.R. Acad. Sci. Paris **178** 1924 pp. 2136–2138. [Lep.]

1116.—Iyengar, M. O. T. On the Indian Anophelines of the *funestus* group and the description of a new species (Diptera, Culicidae). Ind. J. Med. Res. Calcutta **12** 1924 pp. 23–29 2 figs. 1 pl.

1117.—Jablonowski, J. Fauna Regni Hungariae. Thysanoptera. Budapest 1918 pp. 17–18.

1118.—Jablonowski, J. A bor-vagy eczet muszlicza. Termész. Közl. Budapest **53** 1921 pp. 269–281 6 figs. [Dipt.]

1119.—Jack, R. W.—On the African species of the Dynastid genus *Heteronychus.* Trans. Ent. Soc. London **1923** 1924 pp. 367–438 6 pls. [Col.]

1120.—Jacobs, W. Das Duftorgan von *Apis mellifica* und ähnliche Hautdrüsenorgane sozialer und solitärer Apiden. Zs. Morph. Oekol. Tiere Berlin **3** 1924 pp. 1–80 27 figs. [Hym.]

1121.—Jacobson, E. Zur Kenntnis der Biologie javanischer Copeognathen. Tijdschr. Ent. The Hague **67** 1924 Suppmt. pp. 65–71. [Psocopt.]

1122.—Jacobson, E. Notiz zu P. Stein, Anthomyiden aus Java, Sumatra, Waigeoe und Ceram. (Tijdschrift voor Entomologie, Supplement bei deel 62, 1919, pag. 47–86). Tijdschr. Ent. The Hague **67** 1924 Suppmt. pp. 75–77. [Dipt.]

Jacobson, E. *see* Crawley & Jacobson.

1123.—Jacobson, G. De sex speciebus novis generis Chrysomelae L. (Col. Chrysom.) Wiener ent. Ztg. Vienna 41 1924 pp. 78–84.

1124.—Jacquet, J. Description d'une variété caractérisée de l'*Hydroporus duodecimpustulatus,* F. (Col. Dytiscidae). Misc. ent. Castanet-Tolosan **28** 1924 pp. 41–42 1 fig.

1125.—Janisch, E. Experimentelle Untersuchungen über die Beeinflussung der Lebensdauer und des Alterns schädlicher Insekten. Verh. D. Zool. Ges. Berlin **29** 1924 pp. 95–98.

1126.—Janisch, E. Zum Bau der quergestreiften und glatten Muskelsäulchen nach untersuchungen an *Bombus terrestris* und *Helix pomatia.* Anat. Anz. Jena **57** 1924 pp. 246–256.

1127.—Janisch, E. Ueber die experimentelle Beeinflussung der Lebensdauer und des Alterns schädlicher Insekten. I. Mitteilung. Arb. Biol. Reichsanst. Land- u. Forstw. Berlin **13** 1924 pp. 173–195 5 figs. [Lep.]

1128.—Janse, A. J. T. List of species of Pyralidae. Bull. Hill Mus. Witley **1** 1924 pp. 484–488. [Lep.]

1129.—Janse, A. J. T. List of species, including descriptions of new species, belonging to the family Pyralidae. Bull. Hill Mus. Witley **1** 1924 pp. 489–507. [Lep.]

1130.—Janson, O. E. Coleoptera at Lough Neagh (Co. Antrim) and Newcastle (Co. Down). Irish Nat. Dublin **33** 1924 pp. 69–72.

1131.—Janson, O. E. Descriptions of two new Cetoniidae from Madagascar. Ent. Mo. Mag. London **60** 1924 p. 149. [Col.]

1132.—Jansson, A. Coleopterogiska Bidrag. 8. För Sverige nya och andra märkligare skalbaggar. 9. Till frågan om *Limnobaris T-album.* Ent. Tidsk. Stockholm **45** 1924 pp. 145–159. [Col.]

1133.—Jeannel, R. Descriptions préliminaires d'Anophthalmes nouveaux de Serbie (Coleoptera, Carabidae). Bul. Soc. Stiinte Cluj **2** 1924 Sci. nat. pp. 1–12 7 figs.

1134.—**Jeannel,** R. Bathysciinae nouveaux de l'Italie. Boll. Soc. ent. ital. Genoa **56** 1924 pp. 49–62 19 figs. [Col.]

1135.—**Jeffery,** H. G. Diptera: Pulicidae (Fleas). Proc. I. of Wight N. H. Soc. Newport **1** 1922 pp. 123–124.

1136.—**Jensen-Haarup,** A. C. Hemipterological notes and descriptions. III. Ent. Medd. Copenhagen **14** 1924 pp. 323–338 2 figs.

1137.—**Jermyn,** T. Notes on the Diptera of Somerset. Part V. (Appendix). Proc. Somerset. Archaeol. Nat. Hist. Soc. Taunton **68** 1923 pp. 108–121.

1138.—**Jëzhikov,** I. Ueber die morphologische Bedeutung der Larve der Holometabola. (Vorläufige Mitteilung). Ent. Mitt. Berlin **13** 1924 pp. 238–242.

1139.—**Johannsen,** O. A. Eye structure in normal and eye-mutant *Drosophila.* J. Morph. Philadelphia **39** 1924 pp. 337–349 2 pls. 11 figs. [Dipt.]

1140.—**Johannsen,** O. A. A new species of *Dixa* from California. Psyche Boston **31** 1924 pp. 45–46. [Dipt.]

1141.—**Johannsen,** O. A. A new Chloropid subgenus and species from New York. Canad. Ent. Orillia **56** 1924 p. 89. [Dipt.]

1142.—**John,** K. Fruchtbare Paarung zwischen *Sphinx ocellata* Linné ♂ und *Calasymbolus myops* Abbot & Smith ♀. Ent. Jahrb. Leipzig **31** 1922 p. 104. [Lep.]

1143.—**John,** O. Thysanopteren aus West-Sibirien. Ent. Mitt. Berlin **13** 1924 pp. 7–10.

1144.—**John,** O. A new *Platythrips* from Siberia. Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 142–144. [Thysanopt.]

1145.—**Johnson,** C. W. Diptera of the Williams Galapagos Expedition. Zoologica New York **5** 1924 pp. 85–92 1 fig.

1146.—**Joicey,** J. J. & **Talbot,** G. New forms of butterflies from Buru. Bull. Hill Mus. Witley **1** 1924 pp. 508–513 3 pls. [Lep.]

1147.—**Joicey,** J. J. & **Talbot,** G. A catalogue of the Lepidoptera of Hainan. Bull. Hill Mus. Witley **1** 1924 pp. 514–538. (Cont.)

1148.—**Joicey,** J. J. & **Talbot,** G. New forms of African Lepidoptera. Bull. Hill Mus. Witley **1** 1924 pp. 539–564.

1149.—**Joicey,** J. J. & **Talbot,** G. New forms of Indo-Australian butterflies. Bull. Hill Mus. Witley **1** 1924 pp. 565–569. [Lep.]

1150.—**Joicey,** J. J. & **Talbot,** G. Three new South American butterflies. Bull. Hill Mus. Witley **1** 1924 pp. 570–571. [Lep.]

1151.—**Joicey,** J. J. & **Talbot,** G. Descriptions of four new butterflies. Entomologist London **57** 1924 pp. 37–40. [Lep.]

1152.—**Jones,** T. H. The life-history and stages of *Cimolus obscurus* Stål (Hemiptera). Proc. Ent. Soc. Washington **26** 1924 pp. 197–205 2 pls.

1153.—**Jordan,** K. New Anthribidae allied to *Choragus.* Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 606–620. [Col.]

1154.—**Jordan,** K. A race of *Asota heliconia* L. (Hypsidae), which has lost the orange warning colour of the body. Trans. Ent. Soc. London **1924** pp. xxxiv–xxxv. [Lep.]

1155.—**Jordan,** K. On the Saturnoidean families Oxytenidae and Cercophanidae. Nov. Zool. Tring **31** 1924 pp. 135–193 15 pls. [Lep.]

1156.—**Jordan,** K. On the West African Lymantriid genus *Nyctemera* (= *Otroeda*) (Lep. Het.). Nov. Zool. Tring **31** 1924 pp. 217–226 18 figs.

1157.—**Jordan,** K. Anthribidae from the Island of Rodriguez. Nov. Zool. Tring **31** 1924 pp. 227–230. [Col.]

1158.—**Jordan,** K. New Anthribidae. Nov. Zool. Tring **31** 1924 pp. 231-255. [Col.]

1159.—**Jordan,** K. On some genera of Anthribidae allied to *Exillis* Pasc. (1860). Nov. Zool. Tring **31** 1924 pp. 256–260. [Col.]

1160.—**Jordan,** K. On *Hypocysta* and some allied genera of Satyrinae (Lep. Rhop.) from New Guinea and the Solomon Islands. Nov. Zool. Tring **31** 1924 pp. 279–297.

1161.—**Jordan,** K. Two new subspecies of Sphingidae. Nov. Zool. Tring **31** 1924 p. 298. [Lep.]

1162.—**Jordan.** K. H. C. Führer durch die Käferwelt. Leipzig 1923 187 pp. 160 figs. [Col.]

1163.—**Jucci,** C. Su l'eredità del tipo metalbolico nei bachi da seta. I. Il bivoltinismo. Boll. Lab. Zool. Portici **17** 1924 pp. 187–318 ; and Ann. R. Scu. sup. Agric. Portici **19** Sec. 2 1924 134 pp. [Lep.]

1164.—**Jucci,** C. Vario grado di tendenza alla partenogenesi nelle varie razze di bachi da seta (*Bombyx mori*) e probabile correlazione col vario grado di tendenza al bivoltinismo. Atti Accad. Lincei Rendiconti Classe Sci. fis. mat. nat. Rome **33** 2° Sem. 1924 pp. 434–437. [Lep.]

1165.—**Jucci,** C. Su la differenziazione de le caste nella ,società dei Termitidi. 1. Neotenici (Reali veri e neotenici—l'escrezione nei reali neotenici—la fisiologia de la biologia). Atti Accad. Lincei Mem. Classe Sci. fis. mat. nat. Rome Ser. 5 **14** 1924 pp. 269–500 4 pls. 23 figs. [Isop.]

1166.—**Jucci,** C. L'immunità negli insetti. Ann. d'Igiene Rome **34** 1924 pp. 814–832.

1167.—**Jureček,** —. Ein neuer *Pterostichus* (s. str.) aus Russland Ceskoslov. ent. spolecnosti Jubilejni. Sbornik **1924** pp. 144–145 2 figs. [Col.]

1168.—**Kano,** T. Studies on the ground-beetles of the genus *Panagaeus* Latreille from Japan. Insect World Gifu **28** 1924 pp. 399–404. [In Japanese.] [Col.]

1169.—**Karawaiew,** W. Zur Systematik der paläarktischen *Myrmecocystus* (Formicidae), nebst einigen biologischen Notizen. Konowia Vienna 3 1924 pp. 301-308. [Hym.]

1170.—**Karny,** H. H. Beiträge zur malayischen Orthopterenfauna. iv–xi. Treubia Buitenzorg **5** 1924 pp. 1–234 85 figs. 2 pls.

1171.—**Karny,** H. H. On a remarkable new Coniopterygid genus from Egypt (Neuroptera, Megaloptera). Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 474–478 2 figs.

1172.—**Karny,** H. H. On a new Empheriid from Uganda (Copeognatha). Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 245–246 4 figs.

1173.—**Karstens,** H. Schmetterlinge als Schmuck- und Ziergegenstände. Ent. Rdsch. Stuttgart **41** 1924 p. 4. [Lep.]

1174.—**Katsumata,** Y. On the preparation of Coccid specimens. Insect World, Gifu, **28** 1924 pp. 113–124. [Hem.] [Not seen.]

1175.—**Kaucki,** T. F. Seltenere oder neue Macrolepidopteren für Kleinpolen. Polsk. Pismo ent. Lemberg **3** 1924 pp. 89–93.

1176.—**Kautz,** H. Seltene aberriende Falter. Verh. zool.-bot. Ges. Wien **73** (1923) 1924 pp. (156)–(158). [Lep.]

1177.—**Keilin,** D. On the nephrocytes in the larvae and pupae of *Lonchaea chorea* F. (Diptera Acalyptrata.) Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 219–223 5 figs.

1178.—**Keilin,** D. On the appearance of gas in the tracheae of Insects. Proc. Cambridge Phil. Soc. Biol. Sci. **1** 1924 pp. 63–70 3 figs.

1179.—**Keilin,** D. Sur la position primitive des stigmates chez les Insectes et sur le sort des stigmates thoraciques. Bull. Soc. ent. France Paris **1924** pp. 125–128 3 figs.

1180.—**Kéler,** S. Ipidae of the Entomological Department of the Institute for Agricultural Research in Pulawy. Mém. Inst. Nat. polonais Econ. rur. Pulawy Krakow **3** 1922 pp. 269–276. [Col.]

1181.—**Kemner,** N. A. Der Batatenkäfer (*Cylas formicarius* F.) auf Java und den benachbarten Inseln Ostindiens. Zs. angew. Ent. Berlin **10** 1924 pp. 398–435 14 figs. [Col.]

1182.—**Kemner,** N. A. Ueber die Lebensweise und Entwicklung des angeblich myrmecophilen oder termitophilen Genus *Trochoideus* (Col. Endomych.), nach Beobachtungen über *Trochoideus termitophilus* Roepke auf Java. Tijdschr. Ent. The Hague **67** 1924 pp. 180–194 10 figs.

1183.—Kemp, S. Rhynchota of the Siju Cave, Garo Hills, Assam. Rec. Ind. Mus. Calcutta **26** 1924 pp. 93–96. [Hem.]

1184.—Kennedy, C. H. Notes and descriptions of naiads belonging to the dragonfly genus *Helocordulia*. Proc. U. S. Nat. Mus. Washington **64** 1924 art. 12, no. 2502 4 pp. 1 pl. [Odon.]

1185.—Kennel, J. Die palaearktischen Tortriciden. Zoologica, Stuttgart **21** Heft 54 IVa 1921 pp. 545–742 4 pls. 9 figs. [Lep.]

1186.—Kertész, K. A new *Hermione* from Hungary (Dipt.). Folia ent. hungarica, Budapest **1** 1924 pp. 9–11.

1187.—Kerville, H. G. de. Conséquences de la ligature de la tête, avec ou sans décapitation, chez les Vers à soie du mûrier (*Sericaria mori* L.), au moment de la nymphose. Bull. Soc. ent. France Paris **1924** pp. 69–70. [Lep.]

1188.—Kessel, Q. C. Notes on the Streblinae, a subfamily of the Streblidae (Diptera Pupipara). Parasitology, Cambridge **16** 1924 pp. 405–414 8 figs.

Kiaer, H. *see* Friese, Kiaer, Kieffer, and Roman.

1189.—Kieffer, J. J. Chironomides nouveaux ou peu connus de la région paléarctique. Ann. Soc. sci. Bruxelles Mém. **42** 1922 pp. 71–128; Mém. **42** 1923 pp. 138–180. [Dipt.]

1190.—Kieffer, J. J. Chironomides piqueurs de Java. Ann. Soc. sci. Bruxelles C.R. **43** 1923 pp. 134–143. [Dipt.]

1191.—Kieffer, J. J. Six nouveaux Chironomides d'Afrique. Ann. Soc. sci. Bruxelles C. R. **43** 1924 pp. 255–261. [Dipt.]

1192.—Kieffer, J. Chironomides non piqueurs de Java. Ann. Soc. sci. Bruxelles C.R. **43** 1924 pp. 262–270. [Dipt.]

1193.—Kieffer, J. J. Synopse des représentants européens du genre *Trichotanypus* Kieff. Ann. Soc. sci. Bruxelles C.R. **43** 1924 pp. 383–391. [Dipt.]

1194.—Kieffer, J. J. Quelques Chironomides nouveaux et remarquables du nord de l'Europe. Ann. Soc. sci. Bruxelles C.R. **43** 1924 pp. 390–397. [Dipt.]

1195.—Kieffer, J. J. Deux nouveaux Hymenoptères d'Algérie. Bull. Soc. ent. France Paris **1924** pp. 41–43.

1196.—Kieffer, J. J. Description de deux nouveaux genres et de trois nouvelles espèces de Cécidomyies. Broteria, Caminha Ser. Zool. **21** 1924 pp. 87–91. [Dipt.]

1197.—Kieffer, J. J. Rept. Sci. Res. Norweg. Exped. Novaya Zemlya 1921. Chironomidae. Christiania no. **2** 1922 pp. 2–24 15 figs.; no. **9** 1923 pp. 1–11 5 figs. [Dipt.]

Kieffer, J. J. *see* Friese, Kiaer, Kieffer, and Roman.

1198.—Kieper, A. Interessantes von *Pyrameis cardui* L. Intern. ent. Zs. Guben **17** 1924 pp. 145–146. [Lep.]

1199.—Killington, F. J. *Ischnura elegans*, Lind.: its teneral colour phases, and its mature varieties and aberrations. Entomologist, London **57** 1924 pp. 273–278. [Odon.]

1200.—Kinel, J. Koleopterologische Notizen aus Polen. Polsk. Pismo ent. Lemberg **2** 1924 pp. 191–196.

1201.—Kinel, J. Ueber die heimischen Formen von *Niphetodes* Mill. Polsk. Pismo ent. Lemberg **3** 1924 pp. 100–102. [Col.].

King, J. L. *see* Caudell and King.

1202.—King, R. L. Laboratory apparatus and methods. Material for demonstrations of accessory chromosomes. Science New York **60** 1924 pp. 362–363 2 figs.

1203.—Kiritshenko, A. N. Coreidae: Coreinae Faune Russie. Insecta Hemiptera Petrograd **6** pt. 2 1916 pp. 1–395 4 pls. 44 figs. [In Russian.]

1204.—Kiritshenko, A. Beitrag zur Hemipterenfauna des südlichen Armenien. Wiener ent. Ztg. Vienna **41** 1924 pp. 1–5.

1205.—Kirk, H. B. A method of injecting the tracheae of insects. Trans. N. Zealand Inst. Wellington **55** 1924 p. 669.

1206.—Kirkpatrick, T. W. Notes on the oecology of a cave in the Egyptian desert. Cairo J. Sci. **12** 1923 pp. 30–34.

1207.—Kishida, K. A new Aphid injurious to the pear in Japan. Dobuts. Zasshi [Zool. Mag.] Tokyo **36** 1924 pp. 472–474. [In Japanese.] [Hom.]

1208.—Klapacz, M. Les insectes des environs de Lwow. Polsk. Pismo ent. Lemberg **2** 1924 pp. 204–208.

1209.—Kleine, R. Die Gattung *Lyponia* Waterhouse. (4. Beitrag zur Kenntnis der Lycidae.) Ent. Bl. Berlin **20** 1924 pp. 170–175 10 figs. [Col.]

1210.—Kleine, R. Sumatranische Insekten. (Beitrag Nr. 1.) Ent. Mitt. Berlin **13** 1924 pp. 308–310 1 fig. [Col.]

1211.—Kleine, R. Die Myrmekophilie der Brenthidae. Zool. Jahrb. Jena Abt. System. **49** 1924 pp. 197–228 10 figs. [Col.]

1212.—Kleine, R. Drei neue Brenthiden aus der Hauserschen Sammlung. Soc. ent. Stuttgart **39** 1924 pp. 33–34. [Col.]

1213.—Kleine, R. Neue Brenthiden aus dem Musée du Congo Belge. Stettin. ent. Ztg. **84** (1923) 1924 pp. 97–113 6 figs. [Col.]

1214.—Kleine, R. Neue Arten der Gattung *Acicnemis* Lacordaire nebst faunistischen Mitteilungen. Arch. Natg. Berlin **90** 1924 Abt. A Heft 4 pp. 148–164 25 figs. [Col.]

1215.—Kleine, R. Ueber die Larvenminen einiger Orchestini. Zs. wiss. Insektenbiol. Berlin **19** 1924 pp. 203–207 43 figs. 251–254. [Col.]

1216.—Kligler, I. J. Flight of *Anopheles* mosquitoes. Trans. R. Soc. Trop. Med. & Hyg. London **18** 1924 pp. 199–202. [Dipt.]

1217.—Klöcker, A. On a collection of Syrphids from Queensland with descriptions of a new genus and of eight new species. Mem. Queensland Mus. Brisbane **8** 1924 pp. 53–60 1 pl. [Dipt.]

1218.–[Klodnitzki, I. I.] Клодницкий, И. И. Новый род и вид тли из окрестностей Киева. [A new genus and species of Aphid from the environs of Kiev.] Труды 4-го Всероссийского Энтомо-фитопатологического Съезда в Москве 8–14 декабря 1922 [Trans. 4th All-Russ. Ent.-Phytopath. Mtg. Moscow 8–14th Dec. 1922] Petrograd 1924 pp. 61–63 1 fig. [Hom.] [Also in Latin.]

1219.—Knaus, W. 1923 collection and life history notes on *Strategus mormon.* J. New York Ent. Soc. **32** 1924 pp. 124–125. [Col.]

1220.—Knaus, W. A color form of *Cicindela repanda unijuncta.* J. New York Ent. Soc. **32** 1924 p. 126. [Col.]

1221.—Knight, H. H. On the nature of the color patterns in Heteroptera with data on the effects produced by temperature and humidity. Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 258–272 1 pl.

Knight, H. H. *see* Palmer and Knight.

1222.—Knirsch, E. Beitrag zur Fauna blinder Trechen Bulgariens. Trav. Soc. bulgar. Sci. nat. Sofia **11** 1924 pp. 163–166 figs. [Col.]

1223.—Knirsch, E. Ein neuer blinder *Trechus* aus Transsylvanien. Ceskoslov. ent. spolecnosti Jubilejni Sbornik 1924 pp. 146–147. [Col.]

1224.—Knisch, A. Zwei neue nearktische Palpicornier (Col. Hydrophilidae Op. 13.) Ent. Anz. Vienna **4** 1924 pp. 55–56.

1225.—Knisch, A. Neue afrikanische Palpicornier. (Col., Hydrophilidae —Op. 14). Wiener ent. Ztg. Vienna **41** 1924 pp. 17–24.

1226.—Knisch, A. Neue Palpicornier aus dem südlichen Himalaya (Col., Hydrophilidae—Op. 15). Wiener ent. Ztg. Vienna **41** 1924 pp. 29–41.

1227.—Knisch, A. Neue neotropische Palpicornier (Col., Hydrophilidae—Op. 16). Wiener ent. Ztg. Vienna **41** 1924 pp. 114–140.

1228.—Knoll, F. Blütenökologie und Sinnesphysiologie der Insekten. Naturwissenschaften Berlin **12** 1924 pp. 988–993 4 figs.

1229.—Knörzer, A. Bemerkenswerte Erscheinungen unter der Insektenwelt des oberbayerischen Inntals. Mitt. münchn. ent. Ges. **14** 1924 pp. 10–17.

1230.—Koch, A. Entomologische Technik. Handb. biol. Arbeitsmeth. Abt. IX **1** 1923 Lief. 94 pp. 479–534 31 figs.

1231.—Kochler, O. Sinnesphysiologische Untersuchungen an Libellenlarven. Verh. D. Zool. Ges. Berlin **29** 1924 pp. 83–91. [Odon.]

1232.—Kohaut, R. Fauna Regni Hungariae. Hemiptera (Aptera). Budapest 1918 pp. 65–72. [Anopl., Malloph.]

1233.—Kohl, F. F. Die Hymenopteren-Gattung *Belomicrus* A. Costa (s. l.). Konowia Vienna **2** 1923 pp. 98–122, 180–202, 258–278 1 pl. 4 figs.

1234.—Köhler, P. Fauna Argentina. Lepidoptera e collectione Alberto Breyer. II. Teil, Heterocera, Systematischer Katalog und Studien Berichtigungen, Neubeschreibungen. Zs. wiss. Insektenbiol. Berlin **19** 1924 Sonderheft 28 pp. 8 pls.

1235.—Kolbe, H. Zur Kenntnis der Paussiden Australiens: Untergattungen von *Arthropterus* (Col.). D. ent. Zs. Berlin **1924** pp. 345–353.

1236.—Kolbe, H. Australische Paussiden-Arten in deutschen Museen (Col.). Ent. Mitt. Berlin **13** 1924 pp. 64–82.

1237.—Kolbe, H. Ueber den gallenbildenden Rüsselkäfer *Ceuthorhynchus ruebsaameni* m. (Kohlblattrüssler). Ent. Mitt. Berlin **13** 1924 pp. 298–302. [Col.]

1238.—Kolbe, H. Die australischen Paussiden der Wasmann' schen Sammlung. Tijdschr. Ent. The Hague **67** 1924 pp. 1–9. [Col.]

1239.—Kolbe, H. Ueber einige Paussidarten Australiens (Gattung *Arthropterus*). Tijdschr. Ent. The Hague **67** 1924 pp. 10–28. [Col.]

1240.—Konček, S. K. Über Autohämorrhoe bei *Tetrodontophora gigas* Reuter. Zool. Anz. Leipzig **61** 1924 pp. 238–246 3 figs. [Thysanura.]

1241.—Konček, S. K. Zur Histologie über Rückendrüse unserer einheimischen Blattiden. Zs. wiss. Zool. Leipzig **122** 1924 pp. 310–322 13 figs. [Orthop.]

1242.—Könnemann, R. Über den Darm einiger Limnobiidenlarven. Zool. Jahrb. Jena Abt. Anat. **46** 1924 pp. 343–388 pl. [Dipt.]

1243.—Konopacka, W. Les zoocécidies recueillies dans les environs de Varsovie et de Kielce. Mém. Inst. Nat. polonais Econ. rur. Pulawy Krakow **1** 1921 pp. 225–242.

1244.—Kopeć, S. L'influence de l'inanition sur le développement et la durée de la vie des insectes. Mém. Inst. Nat. polonais Econ. rur. Pulawy Krakow **1** 1921 pp. 164–192.

1245.—Kopeć, S. De l'influence de l'inanition des femelles et de celles des mâles sur la progéniture chez les insectes. Mém. Inst. Nat. polonais Econ. rur. Pulawy Krakow **2** 1922 pp. 138–159.

1246.—Kopeć, S. Studies on the influence of inanition on the development and the duration of life in insects. Biol. Bull. Wood's Hole Mass. **46** 1924 pp. 1–21.

1247.—Kopeć, S. On the heterogeneous influence of starvation of male and of female insects on their offspring. Biol. Bull. Wood's Hole Mass. **46** 1924 pp. 22–34.

1248.—Korb, M. Ueber die von mir beobachteten paläarktischen Lepidopteren (Vorkommen, Lebensweise u. s. w.). Mitt. münchn. ent. Ges. **14** 1924 pp. 18–24.

1249.—Korschelt, E. Bearbeitung einheimischer Tiere. Erste Monographie: Der Gelbrand *Dytiscus marginalis* L. Leipzig **1** 863 pp. 471 figs; **2** 1924 964 pp. 405 figs. [Col.]

1250.—Kosminsky, P. Ueber Erzeugung von Intersexen bei *Stilpnotia salicis* L. im Temperatur-Experiment. Biol. Zentralbl. Leipzig **44** 1924 pp. 15–16. [Lep.]

1251.—Kosminsky, P. Der Gynandromorphismus bei *Lymantria dispar* L. unter der Einwirkung äusserer Einflüsse. Biol. Zentralbl. Leipzig **44** 1924 pp. 66–68 3 figs. [Lep.]

1252.—Kostritsky, Toumanoff, Metalnikow, S. *Bacterium tumifaciens* chez la chenille de *Galleria mellonella*. C.R. Acad. Sci. Paris **179** 1924 pp. 225–227.

1253.—Kozhantschikov, W. Materialien zur Macrolepidopteren Fauna des Minussinsk-Bezirkes (Sibirien, Ienissey Gouv.) Jahrb. Martjanov. Staatsm. Minussinsk **1** Lief. 1 1923 pp. 1–50. [Lep.]

1254.—Kozhantschikov, W. Materialien zur Macrolepidopterenfauna des Minussinsk Bezirks. II. Jahrb. Martjanov. Staatsmus. Minussinsk **2** Lief. 1 1924 pp. 66–75.

1255.—Krafka, J., Jr. Development of the compound eye of *Drosophila melanogaster* and its bar-eyed mutant. Biol. Bull. Wood's Hole Mass. **47** 1924 pp. 143–148 3 pls. [Dipt.]

1256.—Krafka, J., Jr. Morphology of the prolegs of Trichopterous larvae. Ann. Ent. Soc. America Columbus **17** 1924 pp. 97–103 2 pls.

Krainska, K. *see* Bledowski & Krainska.

1257.—Krancher, O. & **Uhmann,** E. Die Käfer, ihr Bau und ihre Lebensweise nebst Anleitung zur Beobachtung, Aufzucht und zum Sammeln. Wiesbaden 1924 194 pp. 8 figs. 20 pls. [Col.]

1258.—Krausse, A. Hexapodologische Notizen. vii, 101–115. Arch. Natg. Berlin Abt. A **90** 1924 Heft 4 pp. 144–147.

1259.—Krausse, A. *Formica rufa pratensis incisa* m. v. n. Ent. Jahrb. Leipzig **31** 1922 p. 155 1 pl. [Hym.]

1260.—Krausse, A. Einige Notizen über die Forleulenraupe (*Panolis flammea* Schiff.). Intern. ent. Zs. Guben **18** 1924 pp. 93–94, 105–106. [Lep.]

1261.—Krausse, A. Einige Notizen über den grossen braunen Rüsselkäfer (*Hylobius abietis* L.). Intern. ent. Zs. Guben **18** 1924 pp. 97–98. [Col.]

1262.—Krausse, A. Einige Notizen über die Forleulenpuppe. Intern. ent. Zs. Guben **18** 1924 p. 121. [Lep.]

1263.—Kriesche, R. Zur Kenntnis der Lamiinen (Col., Ceramb.). I. D. ent. Zs. Berlin **1924** pp. 285–290.

1264.—Kriesche, R. Ein neuer Dorcadionine von Borneo (Col., Ceramb.). D. ent. Zs. Berlin **1924** p. 291.

1265.—Kriesche, R. Neue Niphoninen (Col., Ceramb.). D. ent. Zs. Berlin **1924** pp. 353–354.

1266.—Kröber, O. Beiträge zur Kenntnis palaearktischer Tabaniden. II. Teil: Die Untergattung *Therioplectes* Zell. Arch. Natg. Berlin Abt. A **89** Heft 12 (1923) 1924 pp. 55–118. [Dipt.]

1267.—Kröber, O. Die Tabaniden der Philippinen. Arch. Natg. Berlin Abt. A **90** Heft 1 1924 pp. 1–27. [Dipt.]

1268.—Kröber, O. Therevidae. *In* Lindner, Die Fliegen der palaearktischen Region, Stuttgart **26** 1924 pp. 1–32 3 pls. 6 figs.

1268a.—Kröber, O. Conopidae. *Op. cit.* **35** 1924 pp. 1–32 4 pls. 6 figs. [Dipt.]

1269.—Kröber, O. Aegyptische Dipteren aus den Familien der Conopidae, Omphralidae und Therevidae. Bull. Soc. R. ent. Egypte Cairo **1923** 1924 pp. 57–116 26 figs.

1270.—Krüger, E. Die Morphiden Kolumbiens nebst einigen allgemeinen Bemerkungen über Morphiden. D. ent. Zs. Iris, Dresden **38** 1924 pp. 23–39, 99–132. [Lep.]

1271.—Krüger, E. Beiträge zur Kenntnis der columbischen Satyriden. Ent. Rdsch. Stuttgart **41** 1924 pp. 7, 9–10, 16, 19–20, 31–32, 35, 38–39, 41–42, 46–47. [Lep.]

1272.—Kuhl, W. Eine Methode zur Herstellung von Rasiermesserschnitten für topographische Uebersichtsbilder durch ganze Insekten beliebiger Grösse, ohne vorherige Chitinaufweichung. Zs. wiss. Mikrosk. Leipzig **40** (1923) 1924 pp. 369–373.

1273.—Kuhl, W. Der feinere Bau des Zirkulationssystems von *Dytiscus marginalis* L. Zool. Jahrb. Jena Abt. Anat. **46** 1924 pp. 75–198 58 figs. 2 pls. [Col.]

Kühlhorn, F. *see* Feige & Kühlhorn.

1274.—Kühn, A. Versuche über das Unterscheidungsvermögen der Bienen und Fische für Spektrallichter. Nachr. Gesell. Wiss. Göttingen Berlin **1924** pp. 66. [Hym.]

1275.—Künnemann. Vierter Beitrag zur Käferfauna Ost-Holsteins. D. ent. Zs. Berlin **1924** pp. 30–32. [Col.]

1276.—Kuthy, D. Fauna Regni Hungariae : Coleoptera. Budapest 1918 pp. 5–214.

1277.—Kutter, H. *Myrmica scabrinodis* Nyl. var. *ruqulosoides* For. Schweizer ent. Anz. Zürich **3** 1924 pp. 8, 15. [Hym.]

1278.—Kuwana, I. Descriptions and biology of new or little-known Coccids from Japan. Dept. Agric. & Comm. Japan Imp. Pl. Quar. Sta. Yokohama Bull. **3** 1923 (reprinted 1924) pp. 1–67 14 pls. 5 figs. [Hom.]

1279.—Kuwana, I. On the Coccidae of Japan. Insect World Gifu **28** 1924 pp. 3–4 39–43 110–113 etc. [Hom.] [In Japanese.] [Not seen.]

Kuwayama, S. *see* Okamoto and Kuwayama.

1280.—Kuznetzov, N. N. Neue Tenthrediniden aus Russland. Ent. Mitt. Berlin **13** 1924 pp. 11–12. [Hym.]

1281.—Laboissière, V. Chrysomelidae : Galerucinae. Voy. Babault Afrique or. angl. Paris **1924** pp. 1–35 1 pl. 1 fig. [Col.]

1282.—Laboissière, V. Description d'un genre et de deux espèces de Galerucini africains nouveaux de la collection du British Museum (Col., Chrysomelidae). Bull.Soc. ent. France, Paris **1924** pp. 11–14 1 fig.

1283.—Laboissière, V. Étude des Galerucini de la collection du Musée du Congo belge. 4me partie. Rev. zool. afr. Brussels **12** 1924 pp. 135–172 283–315 59 figs. [Col.]

1284.—Lackschewitz, P. Beitrag zur Kenntnis der Tipuliden Finlands (*Tipula lateralis* Mg. sens. lat.). Not. ent. Helsingfors **4** 1924 pp. 84–87. [Dipt.]

1285.—Lacroix, J. L. Sur quelques Odonates d'Afrique de la collection du Muséum. Bull. Mus. Hist. nat. Paris **1924** pp. 215–222.

1286.—Lahille, F. Sobre una nueva especie de cochinilla, *Alichtensia orientalis* Lah. Uruguay Minist. Indust. Defensa agric. Bol. mens. Montevideo **5** 1924 pp. 105–108 10 figs. [Hom.]

1287.—Laidlaw, F. F. The Neuroptera Planipennia recorded from Somerset, with some recent records from Devon and Gloucester. Proc. Somerset. Archaeol. Nat. Hist. Soc. Taunton **69** 1924 pp. 54–69.

1288.—Laidlaw, F. F. A catalogue of the dragonflies (Odonata) recorded from Ceylon, based on material collected by Mr. E. E. Green, with description of a new species. Spolia Zeylanica Colombo **12** 1924 pp. 335–374 15 figs.

1289.—Laidlaw, F. F. Notes on Oriental dragonflies of the genus *Aciagrion*. Proc. U. S. Nat. Mus. Washington **66** 1924 art. 10 no. 2547 pp. 1–9 1 pl. [Odon.]

1290.—Laing, F. A new Psyllid injurious to fig trees. Bull. Ent. Res. London **14** 1924 p. 247 1 fig. [Hom.]

Laing, F. *see* Green and Laing.

1291.—Lallemand, V. Notes sur les Cercopides de l'Amérique centrale et méridionale de la Collection de M. C. B. Williams et de la mienne. Ann. Mag. Nat. Hist. (9) **14** 1924 pp. 477–486. [Hom.]

1292.—Lamarque, H. Sur un vol de Libellules. Proc.-verb. soc. linn. Bordeaux **75** 1923 pp. 194–195 224–225. [Odon.]

1293.—Lamb, G. C. Diptera of the Siju Cave, Garo Hills, Assam. iii. Dolichopodidae. Rec. Ind. Mus. Calcutta **26** 1924 pp. 108–112 5 figs.

1294.—Lamb, L. A tabular account of the differences between the earlier instars of *Pantala flavescens* (Odonata : Libellulidae). Trans. Amer. Ent. Soc. Philadelphia **50** 1924 pp. 289–311 1 pl. 1 fig.

1295.—Lambertie, M. Quelques Névroptères de la Gironde récoltés par le R. P. Longin Navás. Proc.-verb. Soc. linn. Bordeaux **75** 1923 pp. 160–162.

1296.—Lamprecht, H. Zur Biologie von *Dacne bipustulata* Thunbg. Ent. Tidsk. Stockholm **45** 1924 pp. 83–89 3 figs. [Col.]

1297.—Landrock, K. Neue Mycetophiliden aus den Hochmooren von Estland. Zool. Anz. Leipzig **58** 1924 pp. 77–81. [Dipt.]

1298.—Lange, E. Die Eupithecien der Freiberger Gegend. D. ent. Zs. Iris Dresden **38** 1924 pp. 40–50 159–180. [Lep.]

1299.—Lange, E. Ueber einige Aberrationen von *Lycaena argus* Schiff. D. ent. Zs. Iris Dresden **38** 1924 pp. 8–12. [Lep.]

1300.—Langston, J. M. New *Phyllophaga* from Mississippi (Coleoptera, Scarabaeidae). Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 449–451 1 pl.

1301.—Lannin, E. W. The *Charaxes* of Rhodesia. S. Afr. J. Nat. Hist. Pretoria **4** 1924 pp. 308–316. [Lep.]

1302.—Lantz, L. A. Mantes et lézards. Rev. Hist. nat. appl. Paris (1) **5** 1924 pp. 281–284. [Orth.]

1303.—de Lapouge, G. Calosomes nouveaux ou mal connus. Misc. ent. Castanet-Tolosan **28** 1924 pp. 29–36. [Col.]

1304.—Larrousse, F. Triatomes d'Asie; description d'une nouvelle espèce *Triatoma bouvieri*, n. sp. Ann. Parasit. hum. & comp. Paris **2** 1924 pp. 62–70 4 figs. [Hem.]

1305.—Larrousse, F. Description de la femelle de *Triatoma maxima* (Uhler 1894). Ann. Parasit. hum. & comp. Paris **2** 1924 pp. 207–210 1 fig. [Hem.]

1306.—Larsén, O. Zur Kenntnis von *Aphelocheirus aestivalis* Fabr. Ark. Zool. Stockholm **16** 1924 no. 16 pp. 1–21 8 figs. [Hem.]

1307.—Lathy, P. I. Notes on the genus *Agrias* (Lepidoptera). Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 144–156.

1308.—Lathy, P. I. The iridescent species of *Euselasia* (Lepidoptera). Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 283–285.

1309.—Lea, A. M. Descriptions of Australian Curculionidae with notes on previously described species. Part X. Trans. R. Soc. S. Aust. Adelaide **36** 1912 pp. 76–139. [Col.]

1310.—Lea, A. M. On Australian Coleoptera. Part V. Family Chrysomelidae. Rec. S. Aust. Mus. Adelaide **2** 1924 pp. 521–545 2 pls.

1311.—Lea, A. M. The Australian species of *Aulacophora* (Coleoptera, Chrysomelidae). Mem. Queensland Mus. Brisbane **8** 1924 pp. 45–52.

1312.—Lea, A. M. On some Australian Scarabaeidae (Coleoptera). Proc. Linn. Soc. N. S. W. Sydney **49** 1924 pp. 283–312 figs.

1313.—Lebis, E. Contribution à l'étude du *Carabus auratus* L. de la faune franco-rhénane. Misc. ent. Castanet-Tolosan **27** 1924 pp. 62–64.

1314.—Lebis, E. Note rectificative au sujet de la *Cicindela lunulata* Fbr. ab. *lebisi* Tarel. Misc. ent. Castanet-Tolosan **28** 1924 p. 46. [Col.]

1315.—Lebis, E. Description de trois aberrations nouvelles de *Cicindela lunulata* Fbr. Misc. ent. Castanet-Tolosan **28** 1924 pp. 46–47. [Col.]

1316.—Lebrun, H. L'appareil circulatoire des larves de *Corethra*. Ann. Soc. sci. Bruxelles C.R. **42** 1922 pp. 160–164. [Dipt.]

1317.—Lécaillon, A. Sur les races ou variétés nouvelles que l'on peut obtenir par la méthode des croisements chez le Bombyx du mûrier. C.R. Acad. Sci. Paris **178** 1924 pp. 2276–2278. [Lep.]

1318.—Lécaillon, A. Sur la variabilité de la pigmentation et la théorie des mutations, considérées chez le Bombyx du mûrier. C.R. Soc. Biol. Paris **91** 1924 pp. 347–349. [Lep.]

1319.—Le Cerf, F. Lépidoptères nouveaux de la collection du Muséum (Rhopalocères). Bull. Mus. Hist. nat. Paris **1924** pp. 137–139.

1320.—Le Cerf, F. Contribution à la faune des Lépidoptères de l'Erythrée. Ann. Soc. ent. France Paris **93** 1924 pp. 193–210.

1321.—Le Cerf, F. Lépidoptères Hétérocères nouveaux du Maroc. Bull. Soc. ent. France Paris **1924** pp. 25–28.

1322.—Le Cerf, F. Deux Lépidoptères nouveaux du Maroc. Bull. Soc. ent. France Paris **1924** pp. 147–148.

1323.—Le Cerf, F. Description d'un Cosside nouveau du Maroc. Bull. Soc. ent. France Paris **1924** p. 173. [Lep.]

1324.—Le Cerf, F. Réponse à M. P. Pallary sur l'origine de la faune marocaine : Lépidoptères. Bull. Soc. Hist. nat. Afr. N. Algiers **15** 1924 pp. 238–240.

1325.—Le Cerf, F. Catalogue annoté des types et formes nouvelles de Papilios d'Afrique contenues dans la collection du "Hill Museum." Bull. Hill Mus. Witley **1** 1924 pp. 369–399 5 pls. [Lep.]

1326.—Lederer, G. Handbuch für den praktischen Entomologen. I. Abt. Lepidoptera. III. Band. Sphingidae bis Lymantriidae. Frankfurt a/M. 1923 172 pp. [Not seen.]

1327.—Lee, M. O. Respiration in Orthoptera. Amer. J. Physiol. Baltimore **68** 1924 p. 126.

1328.—Leefmans, S. De Koffiebessenboeboek (*Stephanoderes hampei* Ferrari = *coffeae* Hagedorn). I. Levenswijze en oecologie. Meded. Inst. Plantenziekten Buitenzorg no. **57** 1923 94 pp. [Col.]

1329.—Leefmans, S. De Koffiebessenboeboek. II. Bestrijding. Meded. Inst. Plantenziekten Buitenzorg no. **62** 1924 99 pp. 5 charts. [Col.]

1330.—Leeuwen, W. Docters van & **Karny, H. H.** Two new Thrips-galls and their inhabitants, from New South Wales. Proc. Linn. Soc. N.S.W. Sydney **49** 1924 pp. 279–282 3 figs. [Thysanopt.]

1331.—Lehmann, F. E. Kopftransplantation an Insekten. Schweizer ent. Anz. Zürich **3** 1924 pp. 38–39, 42–43.

1332.—Lehmann, F. E. Ueber eine Injektionsmethode zur Darstellung des Tracheensystems der Insekten. Schweiz. ent. Anz. Zürich **3** 1924 pp. 59–60.

1333.—Leiberg, G. Der Ameisenlöwe *Myrmeleon*, dessen Lebensweise und Entwicklung. Ent. Anz. Vienna **4** 1924 pp. 125–127. [Neuropt.]

1334.—Leiby, R. W. & Hill, C. C. The polyembryonic development of *Platygaster vernalis*. J. Agric. Res. Washington **28** 1924 pp. 829–839 8 pls. [Hym.]

1335.—Leininger, H. Hymenopterologische Beiträge zur Fauna Badens. Mitt. badischen Ent. Ver. Freiburg i. Br. **1** 1924 pp. 64–67, 116–123.

1336.—Lemaire, R. J. Hémiptères-Hétéroptères de Belgique. Bull. Soc. ent. Belg. Brussels **6** 1924 pp. 57–61.

1337.—Lengerken, H. v. Prothetelie bei Coleopteren-Larven. Zool. Anz. Leipzig **58** 1924 pp. 179–185 6 figs. ; **59** 1924 pp. 323–330 3 figs.

1338.—Lengerken, H. v. Kopftransplantation an Coleopteren. Zool. Anz. Leipzig **59** 1924 pp. 167–170.

1339.—Lengerken, H. v. Metatelie als Ursache imaginaler Verkrüppelung bei Coleopteren. Zool. Anz. Leipzig **61** 1924 p. 226 fig.

1340.—Lengerken, H. v. Extraintestinale Verdauung. Biol. Zentralbl. Leipzig **44** 1924 pp. 273–293 8 figs.

1341.—Lengerken, H. v. Coleoptera I, II. Biologie der Tiere Deutschlands. Berlin 1924 Teil 40 pp. 1–36 7 figs. pp. 37–104 44 figs.

1342.—Lengersdorf, F. Ueber die Winnertz'sche Sciaridensammlung in Bonn. Wiener ent. Ztg. Vienna **41** 1924 pp. 6–12. [Dipt.]

1343.—Lengersdorf, F. Ueber die Gattung *Cratyna* Winn. (Dipt., Sciar.). Wiener ent. Ztg. Vienna **41** 1924 pp. 87–88.

1344.—Lenz, F. Ueber die beiden hauptsächlichsten Rassen der *Cerura furcula* in Deutschland. Ent. Zs. Frankfort o. M. **37** 1924 pp. 43–44. [Lep.]

1345.—Lenz, F. Eine Konvergenzerscheinung beim Gehäusebau der Chironomiden- und der Trichopteren- larven. Zool. Anz. Leipzig **60** 1924 pp. 105–111 3 figs. [Dipt., Trichop.]

1346.—Lenz, F. & Thienemann, A. Rept. Sci. Res. Norweg. Exped. Novaya Zemlya 1921. No. 3. Chironomidae larvae. Christiania **1922** pp. 1–8. [Dipt.]

1347.—Leon, N. L'armature buccale et la pompe salivaire des *Culicoides pulicaris*. Bull. Sec. sci. Acad. roumaine Bucarest **9** no. 1–2 1924 pp. 17–22 1 pl. 3 figs. [Dipt.]

1348.—Leon, N. Sur l'appareil buccal de la Punaise des lits (*Cimex lectularius*). Ann. Parasit. hum. & comp. Paris **2** 1924 pp. 71–73 2 figs. [Hem.]

Leonard, A. K. *see* Clemens & Leonard.

1349.—Lesne, P. Les Coléoptères Bostrychides de l'Afrique tropicale française. Paris, Lechevalier **1924** 301 pp. 250 figs. 38 maps 1 pl.

1350.—Lestage, J. A. *Atalophlebia brieni* sp. n. Ephémère nouvelle du Brésil. Ann. Soc. ent. Belg. Brussels **64** 1924 pp. 21–24.

1351.—Lestage, J. A. Notes sur les Ephémères de la "Monographical Revision" de Eaton. Ann. Soc. ent. Belg. Brussels **64** 1924 pp. 33–60.

1352.—Lestage, J. A. A propos du genre *Coenis* Steph. = *Brachycercus* Curt. (Ephemeroptera). Ann. Soc. ent. Belg. Brussels **64** 1924 pp. 61–62.

1353.—Lestage, J. A. Où faut-il placer les *Neurorthus* ? Ann. Soc. ent. Belg. Brussels **64** 1924 pp. 65–72. [Neurop.]

1354.—Lestage, J. A. Les Ephémères finnoises de M. le Docteur J. E. Aro. Bull. Soc. ent. Belg. Brussels **6** 1924 pp. 33–36.

1355.—Lestage, J. A. *Siphlonurus linnaeanus* ou *Siphlurella linnaeana* Etn. (Fam. Siphlonuridae). Notes sur une Ephémère probablement belge. Bull. Soc. ent. Belg. Brussels **6** 1924 pp. 47–53.

1356.—Lestage, J. A. Deux nouveaux cas de commensalisme chez des larves aquatiques de Chironomides. Bull. Soc. ent. Belg. Brussels **6** 1924 pp. 62–63. [Dipt.]

1357.—Lestage, J. A. Note sur *Sympherobius pygmaeus* Rambur (*striatellus* Klp.) (Planipennia-Hemerobiidae). Bull. Soc. ent. Belg. Brussels **6** 1924 pp. 67–68.

1358.—Lestage, J. A. Les Ephémères de l'Afrique du Sud. Catalogue critique et systématique des espèces connues et description de trois genre nouveaux et de sept espèces nouvelles. Rev. zool. afr. Brussels **12** 1924 pp. 316–352 1 fig.

1359.—Lestage, J. A. Etudes sur les Ephémères du Congo Belge. II. Un nouveau *Cloeon* du Katanga (*Cloeon smaeleni* nov. sp.) Rev. zool. afr. Brussels **12** 1924 pp. 426–428 1 fig.

1360.—Lestage, J. A. Aberrations nouvelles de Coccinelles. Ent. Rec. London **36** 1924 pp. 155–156. [Col.]

1361.—Levitt, M. & **Spett,** G. Matériaux pour l'étude de l'appareil génital intérieur des Phytophages (Coleoptera, Chrysomelidae). C.R. Acad. Sci. Russie Leningrad **1924** pp. 67–70. [In Russian.]

1362.—Lewek, T. Ist *Cicindela maritima* Latr. eine selbständige Art ? Ent. Bl. Berlin **20** 1924 pp. 46–50 2 figs. [Col.]

1363.—Light, S. F. The Termites (white ants) of China with descriptions of six new species. China J. Sci. and Arts Shanghai **2** 1924 pp. 50–60, 140–142, 242–254, 354–358. [Isopt.]

1364.—Lindberg, H. Drei neue Lygaeiden (Hem. Het.). Konowia Vienna **3** 1924 pp. 37–41.

1365.—Lindberg, H. Cicadinenfunde aus Schweden. Not. ent. Helsingfors **4** 1924 pp. 40–44 6 figs. [Hom.]

1366.—Lindberg, H. Zur Kenntnis der paläarktischen Cicadina. II. Not. ent. Helsingfors **4** 1924 pp. 106–114 14 figs. [Hom.]

1367.—Lindinger, L. Einführung in die Kenntnis der deutschen Schildläuse. Ent. Jahrb. Leipzig **32** 1923 pp. 138–152 1 pl. [Hom.]

1368.—Lindinger, L. Die Schildläuse der mitteleuropäischen gewächshäuser. Ent. Jahrb. Leipzig **33-34** 1924 167–191. [Hom.]

1369.—Lindner, E. Dipterologische Studien. Konowia Vienna **2** 1923 pp. 1–11 ; **3** 1924 pp. 65–75.

1370.—Lindner, E. Zur Biologie von *Lucilia silvarum* Meig. Zs. wiss. Insektenbiol. Berlin **19** 1924 pp. 157–159 1 fig. [Dipt.]

1371.—Lindner, E. Eine neue Chiromyzide (Dipt.) *Clavimyia alticola* Lind. spec. nov. Zool. Anz. Leipzig **60** 1924 p. 160 2 figs.

1372.—Lindner, E. Zur Formenkenntnis indischer *Catopsilia*-Arten. Ent. Rdsch. Stuttgart **41** 1924 pp. 1–3. [Lep.]

1373.—Lindner, E. In Lindner, Die Fliegen der palaearktischen Region. **20** Rhagionidae 1924 pp. 1–32 2 pls. 14 figs. [Dipt.]

1373a.—Lindner, E. Die Fliegen der palaearktischen Region. Stuttgart 1924. *See* **Kröber.**

1374.—[Lindtrop, G. T.] Линдтроп, Г. Т. Белый Малярийный комар. *Cellia* (*Anopheles*) *pulcherrima* Theob. в Азербейджане. [The white malaria mosquito *A. pulcherrimus* in Azerbaijan.] Russ. J. Trop. Med. Moscow **1924** no. 3 pp. 38–40. [German summary, p. 58.] [Dipt.]

1375.—Lineburg, B. Communication by scent in the honey bee—a theory. Amer. Nat. New York **58** 1924 pp. 530–537. [Hym.]

1376.—Lipina, N. Ueber die Chironomiden des vor der Donmündung gelegenen Gebietes. Russ. hydrobiol. Zts. Saratov **3** 1924 pp. 291–292 1 fig. [Dipt.]

1377.—Lombardi, L. Caratteri intermedi di colorazione nelle uova del filugello in rapporto al bivoltinismo. Boll. R. Staz. speriment. Gelsicoltura e Bachicoltura Ascoli Piceno **3** 1924 pp. 4–7. [Lep.]

1378.—Lomnicki, J. Enumeratio Curculionidarum generis Lipari Oliv. Muzaei Dziediszyckiani Rozpraw i Wiadomosci z Muzeum im. Dzieduszyckich Lemberg **9** 1924 separate pp. 1–7. [Col.]

1379.—Lomnicki, J. Sur les trois gynandromorphes de la fourmi *Myrmica rugulosa* Nyl. Kosmos Bull. Soc. polonaise Naturalistes, Lemberg **49** 1924 pp. 817–830 5 figs. [Hym.] [In Polish, with German summary.]

Lott, R. B. *see* Weiss & Lott.

1380.—Louvet, G. Liste raisonnée des Coléoptères Carabiques recueillis dans deux vallées subpyrénéennes. Misc. ent. Castanet-Tolosan **28** 1924 pp. 13–20.

1381.—Lowther, R. C. Lepidoptera in the Grange District. Lancs. Ches. Nat. **17** 1924 pp. 30–31.

1382.—Lucas, D. Contribution à l'étude des Lepidoptères marocains. Bull. Soc. ent. France Paris **1924** p. 78.

1383.—Lucas, W. J. Some Swiss insects: 1923. Entomologist London **57** 1924 pp. 87–88.

1384.—Lucas, W. J. Notes on British Paraneuroptera (Odonata) in 1923. Entomologist London **57** 1924 pp. 121–124.

1385.—Lucas, W. J. Notes on British Orthoptera (including Dermaptera) in 1923. Entomologist London **57** 1924 pp. 152–155.

1386.—Lucas, W. J. Notes on British Neuroptera (including Megaloptera and Mecoptera) in 1923. Entomologist London **57** 1924 pp. 177–179.

1387.—Luigioni, P. Una nuova varietà del *Carabus lefebvrei* Dej. (Coleoptera Fam. Carabidae). Boll. Soc. ent. ital. Genoa **56** 1924 pp. 5–6.

1388.—Luigioni, P. Sulla patria del *Carabus lefebvrei* Dej. var. *lombardii* m. Boll. Soc. ent. ital. Genoa **56** 1924 pp. 87–89. [Col.]

1389.—Luigioni, P. Animalia riscontrata in un *Oryctes nasicornis* L. Atti pont. Accad. nuovi Lincei Rome **77** 1924 pp. 37–38. [Col.]

1390.—Luigioni, P. Influenza del diboscamento sulla vita degli insetti xilofagi. Atti pont. Accad. nuovi Lincei Rome **77** 1924 pp. 39–40.

1391.—Luna, de. Sur la participation d'une peroxydase à l'apparition du pigment chez la *Drosophila melanogaster* Loew. C.R. Acad. Sci. Paris **178** 1924 pp. 525–527, pp. 878–881. [Dipt.]

1392.—Luna, de. Sur la présence d'un ovaire accessoire chez *Drosophila melanogaster.* C.R. Acad. Sci. Paris **178** 1924 pp. 2274–2276 1 fig. [Dipt.]

1393.—Lundblad, O. Nagra ord om aculeat- och tubuliferfaunan i Lycksele lappmark. Ent. Tidsk. Stockholm **45** 1924 pp. 17–18. [Hym.]

1394.—Lundie, A. E. A biological study of *Aphelinus mali* Hald., a parasite of the woolly apple aphid, *Eriosoma lanigera* Hausm. Cornell Univ. Agric. Expt. Sta. Ithaca Mem. **79** 1924 27 pp. 6 figs. [Hym.]

1395.—Lutshnik, V. A descriptive catalogue of the Geodephagous Coleoptera of Minussinsk Territory. I, II, III. Ежегодн. Гос. Муз. им. Н. М. Мартьянова г. Минусинск [Jahrb. Martjanov. Staatsmus. Minussinsk] **2** Lief. 1 1924 pp.1–65. [In Russian with German summary and descriptions.]

1396.—Lutz, F. E. Apparently non-selective characters and combinations of characters, including a study of ultra-violet in relation to the flower-visiting habits of insects. Ann. Acad. Sci. New York **29** 1924 pp. 181–283 7 pls. 48 figs.

1397.—Lyle, G. T. Contributions to our knowledge of the British Braconidae. Entomologist London **57** 1924 pp. 11–13, 62–65, 84–87, 99–103, 3 figs. [Hym.]

1398.—McAtee, W. L. Records of species of the genus *Erythroneura* (Homoptera; Eupterygidae) with descriptions of new forms. Proc. Biol. Soc. Washington **37** 1924 pp. 131–134.

1399.—McAtee, W. L. Notes on the genus *Dikraneura* in the United States (Homoptera; Eupterygidae). Proc. Ent. Soc. Washington **26** 1924 pp. 75–76.

1400.—McAtee, W. L. Notes on *Cenchrea* Westwood and *Cedusa* Fowler in America (Homoptera: Fulgoroidea). Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 175–186 1 pl.

1401.—McAtee, W. L. Notes on a collection of *Erythroneura* and *Hymetta* (Eupterygidae) chiefly from Illinois, with descriptions of new forms. Bull. Illinois Nat. Hist. Survey, Urbana **15** 1924 pp. 39–44. [Hom.]

1402.—McAtee, W. L. & **Malloch,** J. R. Some annectant Bugs of the superfamily Cimicoidea (Heteroptera). Bull. Brooklyn Ent. Soc. **19** 1924 pp. 69–82 1 pl.

McAtee, W.L. *see* Cole, Malloch & McAtee; *also* Malloch & McAtee.

McColloch, J. W. *see* Dawson & McColloch; *also* Hayes & McColloch.

1403.—MacDougall, R. S. On the distribution of the ox warble flies (*Hypoderma bovis* and *Hypoderma lineatum*) in Scotland. Scot. Nat. Edinburgh **1924** pp. 85–88. [Dipt.]

1404.—McDunnough, J. New Ephemeridae from Illinois. Canad. Ent. Orillia **56** 1924 pp. 7–9 1 fig.

1405.—McDunnough, J. Some new Canadian Argynnid races (Lepid.). Canad. Ent. Orillia **56** 1924 pp. 42–43.

1406.—McDunnough, J. New Canadian Ephemeridae with Notes. II. Canad. Ent. Orillia **56** 1924 pp. 90–98 & 128–133.

1407.—McDunnough, J. New North American Ephemeridae. Canad. Ent. Orillia **56** 1924 pp. 221–226 1 pl.

1408.—McDunnough, J. Some synonymical notes on Lepidoptera. Canad. Ent. Orillia **56** 1924 p. 249.

1409.—McDunnough, J. Notes on the *ribearia* group of the genus *Itame*. (Lepidoptera). Canad. Ent. Orillia **56** 1924 pp. 271–277 1 pl.

1410.—McDunnough, J. New Ephemeridae from New England. Occ. Paprs. Soc. Nat. Hist. Boston **5** 1924 pp. 73–76 1 pl. [Ephem.]

1411.—Macfie, J. W. S. On some Egyptian Ceratopogoninae. Bull. Ent. Res. London **15** 1924 pp. 61–67 2 figs. [Dipt.]

Macfie, J. W. S. *see* Ingram & Macfie.

1413.—MacGillivray, A. D. Crampton on the labium of certain Holometabola. Proc. Ent. Soc. Washington **26** 1924 pp. 133–141 1 pl.

1414.—MacGregor, M. E. Special apparatus and technique for the study of Mosquitoes and aquatic Insects. Parasitology Cambridge **16** 1924 pp. 388–397 7 figs.

1415.—MacGregor, M. E. *Aëdes* (*Stegomyia*) *mascarensis*, MacGregor; a new mosquito from Mauritius. Bull. Ent. Res. London **14** 1924 pp. 409–412 1 fig. [Dipt.]

1416.—Macnamara, C. The food of Collembola. Canad. Ent. Orillia **56** 1924 pp. 99–105 1 fig. 1 pl.

1417.—Mader, L. Das Insektenleben Deutsch-Oesterreichs mit Anhang über Gallen und ähnliche Pflanzenverunstaltungen samt deren Erzeuger (mit besonderer Berücksichtgung der Wiener Umgebung). Hainfeld (N. Austria) 1920 pp. 1–216. [Not seen.]

1418.—Mader, L. Coccinellidae, Tribus Scymnini, Bestimmungs-Tabellen europäischen Coleopteren Heft 94 Troppau 1924 pp. 1–48. [Col.]

1419.—Maličky, J. Několik poznamek o Tortricidech Podbrdska (Lep.). [Some notes on Tortricids of Podbesk, Czecho-Slovakia.] Casopis Prague **20** 1923 pp. 129–131.

1420.—Mallász, J. von. Ein Verkannter *Anophthalmus.* Bul. Soc. Stiinte Cluj 1924 Sci. nat. **2** pp. 13–16. [Col.]

1421.—Mallet, P. M. Note sur les variétés de la *Chrysomela graminis* L. Misc. ent. Castanet-Tolosan **27** 1924 pp. 76–77. [Col.]

1422.—Malloch, J. R. Descriptions of Neotropical two-winged flies of the family Drosophilidae. Proc. U. S. Nat. Mus. Washington **66** 1924 art. 3 no. 2540 pp. 1–11. [Dipt.]

1423.—Malloch, J. R. A new species of the genus *Brachycistus,* Fox (Hymenoptera, Aculeata). Bull. Brooklyn Ent. Soc. **19** 1924 p. 23.

1424.—Malloch, J. R. A new North American species of *Amiota,* Loew (Diptera). Bull. Brooklyn Ent. Soc. **19** 1924 pp. 51–52.

1425.—Malloch, J. R. A new species of *Canacea* from the United States (Diptera: Ephydridae). Proc. Ent. Soc. Washington **26** 1924 pp. 52–53.

1426.—Malloch, J. R. A new species of *Conicera* from Porto Rico (Phoridae, Diptera). Proc. Ent. Soc. Washington **26** 1924 p. 73.

1427.—Malloch, J. R. A new genus and species of Muscidae (Diptera). Proc. Ent. Soc. Washington **26** 1924 p. 74.

1428.—Malloch, J. R. The American species of the Drosophilid genus *Stegana* (Diptera). Ent. News Philadelphia **35** 1924 pp. 96–100.

1429.—Malloch, J. R. The North American species of the genus *Hoplogaster* (Diptera: Anthomyiidae). Ent. News Philadelphia **35** 1924 pp. 171–172.

1430.—Malloch, J. R. Two new Phoridae from the eastern United States (Diptera). Ent. News Philadelphia **35** 1924 pp. 355–357.

1431.—Malloch, J. R. New and little-known Calyptrate Diptera from New England. Psyche Boston **31** 1924 pp. 193–204 1 pl.

1432.—Malloch, J. R. Two new Cordylurid flies from the Pacific Coast. Pan-Pacific Ent. S. Francisco **1** 1924 pp. 14–15.

1433.—Malloch, J. R. Three new species of *Agromyza* and synonymical notes (Diptera, Agromyzidae). Canad. Ent. Orillia **56** 1924 pp. 191–192.

1434.—Malloch, J. R. Exotic Muscaridae (Diptera).—XII. Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 409–424; XIII (9) **14** 1924 pp. 257–274 figs.; XIV (9) **14** 1924 pp. 513–522 1 fig.

1435.—Malloch, J. R. A new species of *Atherigona* from the Philippines (Diptera, Anthomyiidae). Not. ent. Helsingfors **4** 1924 p. 74.

1436.—Malloch, J. R. Two Drosophilidae from Coimbatore. Mem. Dept. Agric. India Calcutta **8** 1924 pp. 63–65. [Dipt.]

1437.—Malloch, J. R. A new aphidiphagous fly from Coimbatore. Mem. Dept. Agric. India Calcutta **8** 1924 pp. 67–68. [Dipt.]

1438.—Malloch, J. R. Notes on Australian Diptera. Nos. ii–iv. Proc. Linn. Soc. N.S.W. Sydney **49** 1924 pp. 138–146, 329–338, 348–359 9 figs.

1439.—Malloch, J. R. The recorded Calliphoridae of New Zealand (Diptera). Trans. N.Z. Inst. Wellington **55** 1924 pp. 638–640.

1440.—Malloch, J. R. & **McAtee,** W. L. Keys to flies of the families Lonchaeidae, Pallopteridae, and Sapromyzidae of the eastern United States, with a list of the species of the District of Columbia. Proc. U.S. Nat. Mus. Washington **65** 1924 art. 12 no. 2525 26 pp. 2 pls. [Dipt.]

1441.—Malloch, J. R. & **McAtee,** W. L. Flies of the family Drosophilidae of the district of Columbia region, with keys to genera and other notes of broader application. Proc. Biol. Soc. Washington **37** 1924 pp. 25–41 2 pls. [Dipt.]

Malloch, J. R. *see* Cole, Malloch & McAtee; *also* McAtee & Malloch.

1442.—Mancini, C. Osservazioni su alcuni Scarabaeidi italiani. Boll. Soc. ent. ital. Genoa **56** 1924 pp. 44–47. [Col.]

1443.—Manee, A. H. Ecological observations on Rhynchophora in Southern Pines, N.C. Bull. Brooklyn Ent. Soc. **19** 1924 pp. 40–43. [Col.]

1444.—Mann, M. C. A demonstration of the stability of the genes of an inbred stock of *Drosophila melanogaster* under experimental conditions. J. Exp. Zool. Philadelphia **38** 1923 pp. 213–244 2 charts. [Dipt.]

1445.—Mann, W. M. Myrmecophiles from the Western United States and Lower California. Ann. Ent. Soc. America Colombus **17** 1924 pp. 87–95 2 figs. [Col., Dipt.]

1446.—Mann, W. M. Notes on Cuban Ants. Psyche Boston **31** 1924 pp. 19–23 1 fig. [Hym.]

1447.—Manon, —. Supplément au catalogue et observations sur les Lépidoptères des environs de Bordeaux avec présentations des exemplaires. Proc. verb. Soc. linn. Bordeaux **75** 1923 pp. 149–152, 185–190, 228–234.

1448.—Mansbridge, W. Notes on Lepidoptera for 1922–1923. Lancs. Ches. Nat. **16** 1924 pp. 245–249.

1449.—Marchal, P. Les néonates dans le genre *Eriosoma* Leach (= *Schizoneura* Hartig). Rev. Path. vég. & Ent. agric. Paris **11** 1924 pp. 46–55. [Hom.]

1450.—Marié, P. Observation sur le vol des *Prionus* (Col.). Bull. Soc. ent. France Paris **1924** p. 80.

1451.—Markovitch, A. Matériaux de la faune entomologique dans les environs de Razgrade. Trav. Soc. bulgar. Sci. nat. Sofia **2** 1904 pp. 220–252. [Lep.] [In Bulgarian, summary in French.]

1452.—Markovitch, A. Beitrag zur Fauna der Schmetterlinge im Rhodopengebirge. Trav. Soc. bulgar. Sci. nat. Sofia **4** 1910 pp. 80–92. [In Bulgarian; summary in German.] [Lep.]

1453.—Markovitch, A. *Velleopsis marginiventris* Fairm. Trav. Soc. bulgar. Sci. nat. Sofia **8** 1915 pp. 148–150. [Col.] [In Bulgarian.]

1454.—Markovitch, A. Papillons des Rhodopes. Trav. Soc. bulgar. Sci. nat. Sofia **10** 1923 pp. 121–141. [In Bulgarian; summary in French.] [Lep.]

1455.—Marriner, T. F. The Cumberland Coccinellidae. Ent. Rec. London **36** 1924 pp. 85–88. [Col.]

1456.—Marshall, G. A. K. On new Curculionidae from India (Coleoptera). Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 281–296.

1457.—Marshall, J. F. An improved form of apparatus for "low power" Insect photomicrography. Bull. Ent. Res. London **15** 1924 pp. 49–50 1 pl.

1458.—Marten, W. Winterschmetterlinge in Süd-Europa. Ent. Rdsch. Stuttgart **41** 1924 p. 17. [Lep.]

1459.—Martin, J. O. Studies in the genus *Mecas* (Coleop.). Ent. News Philadelphia **35** 1924 pp. 244–245.

1460.—Martin, L. *Catopsilia pyranthe,* L. Eine Pieridenstudie als Baustein für eine Spätere Ausgabe des Seitz'schen Werkes. Mitt. münchn. ent. Ges. **14** 1924 pp. 119–129. [Lep.]

1461.—Martin, L. Die Tagfalter der Insel Celebes. Eine kritische Studie mit einigen Neubeschreibungen. (Fortsetzung aus Deel **63** 1920.) Tijdschr. Ent. The Hague **67** 1924 pp. 32–116. [Lep.]

1462.—Martini, E. Gedanken und Rechnungen über Vermehrung und Verbreitung der Lebewesen. Mit Anwendung auf Stechmückenfragen. Arch. Hydrobiol. Stuttgart **14** 1924 pp. 726–740 1 fig. [Dipt.]

1463.—Martini, E. Culiciden-Beobachtungen 1922, 1923. Zs. angew. Ent. Berlin **10** 1924 pp. 436–447. [Dipt.]

1464.—Martynov, A. V. Contributions à la morphologie du thorax des insectes. C.R. Acad. Sci. Russ. Leningrad **1924** pp. 57–59. [In Russian.]

1465.—**Martynov,** A. V. Sur les organes facettiques aux ailes des insectes. C.R. Acad. Sci. Russ. Leningrad **1924** pp. 71–73.

1466.—**Martynov,** A. V. Sur la classification et l'évolution de la fam. Phryganeidae (Trichoptera). C.R. Acad. Sci. Russ. Leningrad **1924** pp. 77–80. [In Russian.]

1467.—**Martynov,** A. V. To the knowledge of Baicalinini, a group of endemic Baicalian Trichoptera. C.R. Acad. Sci. Russ. Leningrad **1924** pp. 93–96.

1468.—[**Martynov,** A. V.] Мартинов, А. В. Trichoptera. Практическая Энтомология. [Practical Entomology.] Государственное Издательство [Govt. Pubn.] Leningrad **5** 1924 iv + 388 pp. 248 figs. 1 map.

1469.—**Martynov,** A. V. Preliminary revision of the family Phryganeidae its classification and evolution. Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 209–224 2 figs. [Trichopt.]

1470.—**Masi,** L. Nuova specie di *Trichomasthus.* (Hymen. Chalcididae, Encyrtinae.) Boll. Soc. ent. ital. Genoa **56** 1924 pp. 28–29.

1471.—**Masi,** L. Note sul genere *Megalocolus* (Hym. Chalcididae). Ann. Mus. civ. St. nat. Genoa Ser. 3 **10** (50) 1924 pp. 182–186. [Hym.]

1472.—**Masi,** L. Nuove specie di *Chalcis* raccolte nella Persia dal March. G. Doria. Ann. Mus. civ. St. nat. Genoa Ser. 3 **10** (50) 1924 pp. 187–192. [Hym.]

1473.—**Masi,** L. Nuovo genere di Chalcididae affine ai *Dirhinus.* Ann. Mus. civ. St. nat. Genoa Ser. 3 **10** (50) 1924 pp. 244–248 1 fig. [Hym.]

1474.—**Mason,** P. W. A new genus and species of Aphids (Homoptera). Proc. Ent. Soc. Washington **26** 1924 pp. 49–52 1 pl.

1475.—**Mast,** S. O. The process of photic orientation in the robber-fly, *Proctacanthus philadelphicus.* Amer. J. Physiol. Baltimore **68** 1924 pp. 262–279 5 figs. [Dipt.]

1476.—**Mast,** S. O. & **Dolley,** W. L. The effect of luminous intensity on the relation between stimulating efficiency and flash-frequency of intermittent light in the drone fly *Eristalis tenax.* Amer. J. Physiol. Baltimore **68** 1924 pp. 285–293. [Dipt.]

1477.—**Matheson,** R. The genera of Culicidae of North America. Canad. Ent. Orillia **56** 1924 pp. 157–161 11 figs. [Dipt.]

1478.—**Matheson,** R. Notes on Culicidae (*Aëdes*). Insec. Insc. Menst. Washington **12** 1924 pp. 22–24. [Dipt.]

1479.—**Mathew,** G. F. Some notes upon breeding *Heodes phlaeas.* Entomologist London **57** 1924 pp. 179–182. [Lep.]

1479a.—**Matsumura,** S. Neue Cicadinen aus Europa und Mittelmeergebiet. J. Coll. Sci., Tokyo **23** no. 6 1908 pp. 1–46, 1 pl. [Hom.]

1480.—**Matthey,** R. Biologie de *Tachina larvarum* Meigen. Ann. Parasit. hum. & comp. Paris **2** 1924 pp. 202–206 4 figs. [Dipt.]

1481.—**Maulik,** S. A new Hispid beetle injurious to oil palms in Brazil. Bull. Ent. Res. London **14** 1924 pp. 245–246 1 fig. [Col.]

1482.—**Maulik,** S. Note sur *Callispa latipennis* Pic [Col., Chrysomelidae]. Bull. Soc. ent. France Paris **1924** pp. 217–218.

1483.—**Mavor,** J. W. Gynandromorphs from X-rayed mothers. Amer. Nat. New York **58** 1924 pp. 525–529 1 fig. [Dipt.]

1484.—**Mavor,** J. W. & **Svenson,** H. K. Crossing-over in the second chromosome of *Drosophila melanogaster* in the F_1 generation of X-rayed females. Amer. Nat. New York **58** 1924 pp. 311–315. [Dipt.]

1485.—**Maxwell,** S. S. The effect of light and of darkness on the sign of the heliotropism of the water-boatman, *Corisa.* Amer. J. Physiol. Baltimore **68** 1924 p. 126. [Hem.]

1486.—**May,** E. Observations on the duration of the pupal stage of *Rothschildia speculum* (Maas. & Weym.) and others of the same genus. Arch. Mus. Rio de Janeiro **24** 1923 pp. 349–351. [Lep.]

1487.—May, E. Migraçoes de Borboletas no Brasil, com especial referencia á *Mechanitis nessaea.* Bol. Mus. Nac. Rio de Janeiro **1** 1924 pp. 165–166. [Lep.]

1488.—May, E. *Morpho absoloni* sp. nov. Bol. Mus. Nac. Rio de Janeiro **1** 1924 pp. 217–218. [Lep.]

1489.—May, E. Notas sobre *Agrias claudia* f. *claudina.* Bol. Soc. ent. Brasil Rio de Janeiro **1923** no. 4–6 (1924) pp. 15–16. [Lep.] [Also in English.]

1490.—Mayor, C. M. Collecting in South Devon; a comparison with twenty years ago. Ent. Mo. Mag. London **60** 1924 pp. 1–3.

1491.—de Meijere, J. C. H. Verzeichnis der holländischen Agromyzinen. Tijdschr. Ent. The Hague **67** 1924 pp. 119–155 1 fig. [Dipt.]

1492.—de Meijere, J. C. H. Studien über süd-ostasiatische Dipteren. XVI. Tijdschr. Ent. The Hague **67** 1924 pp. 197–224.

1493.—de Meijere, J. C. H. Studien über südostasiatische Dipteren. XV. Dritter Beitrag zur Kenntnis der sumatranischen Dipteren. Tijdschr. Ent. The Hague **67** 1924 Suppmt. pp. 1–64 10 figs.

1494.—Meisenheimer, J. Experimentelle Studien zur Soma- und Geschlechtsdifferenzierung. Dritter Beitrag. Die Vererbung von Art- und Geschlechtsmerkmalen bei *Biston*-Artkreuzungen. Zool. Jahrb. Jena Abt. Allgem. Zool. **41** 1924 pp. 1–90 5 pls. 50 figs. [Lep.]

1495.—Meissner, O. Bläulingsraupen und Ameisen. Intern. ent. Zs. Guben **17** 1924 p. 146. [Lep.]

1496.—Meissner, O. Nahrungsarten. Intern. ent. Zs. Guben **18** 1924 pp. 185–186.

1497.—Melander, A. L. Review of the Dipterous Family Piophilidae. Psyche Boston **31** 1924 pp. 78–86.

1498.—de Mello Leitão, C. Novo *Myrmecium* do Brasil. Bol. Soc. ent. Brazil Rio de Janeiro **1923** no. 4–6 (1924) pp. 11–12. [Hym.]

1499.—Melvill, J. C. A sketch of Kersall Moor. Its history and surroundings. With special allusion to the discovery there of *Oecophora woodiella* Curtis. Lancs. Ches. Nat. **16** 1924 pp. 207–212. [Lep.]

1500.—Menor, J. G. Descripción de una *Noualhieria* nueva de Canarias (Hemipt., Lygaeidae). Bol. R. Soc. esp. Hist. nat. Madrid **24** 1924 pp. 152–155.

1501.—Menozzi, C. Una specie inedita di *Eciton* Latr. del sottogenere *Labidus* Jur. (Hymen: Formicidae). Boll. Soc. ent. ital. Genoa **56** 1924 pp. 29–31.

1502.—Menozzi, C. Nuova specie di *Dolichoderus* Lund del Perù, *Dolichoderus* (*Hypoclinea*) *grandii* n. sp. Boll. Soc. ent. ital. Genoa **56** 1924 pp. 119–120. [Hym.]

1503.—Méquignon, A. Sur quelques formes mélanisantes de Coléoptères. Bull. Soc. ent. France Paris **1924** pp. 84–85.

1504.—Méquignon, A. Sur la variabilité de *Mycetophagus piceus* F. (Col., Clavicornia). Bull. Soc. ent. France Paris **1924** pp. 104–107.

1505.—Mercet, R. G. Eulófidos de España i–ii. Bol. R. Soc. esp. Hist. nat. Madrid **24** 1924 pp. 54–59, 458–464 6 figs. [Hym.]

1506.—Mercet, R. G. Los géneros *Leptomastidea, Callipteroma* y *Gyranusa.* Bol. R. Soc. esp. Hist. nat. Madrid **24** 1924 pp. 252–260 3 figs. [Hym.]

1507.—Mercet, R. G. Los géneros *Calometopia* y *Pentacnemus* (Him. Calcidoideos). Bol. R. Soc. esp. Hist. nat. Madrid **24** 1924 pp. 321–323 1 fig.

1508.—Mercet, R. G. Pteromálidos de España (Hym., Chalc.). (Primera nota.) Bol. R. Soc. esp. Hist. nat. Madrid **24** 1924 pp. 421–430 4 figs.

1509.—Mercier, L. L'atrophie des muscles du vol après la chute des ailes chez *Lipoptena cervi* L. (Diptère pupipare). C.R. Acad. Sci. Paris **178** 1924 pp. 591–594 2 figs.

1510.—Mercier, L. Malformations produites chez une mouche (*Calliphora erythrocephala* Meig.) par l'action des vapeurs de naphtaline; réapparition des anomalies dans une seconde génération élevée dans les conditions normales. C.R. Acad. Sci. Paris **178** 1924 pp. 1326–1329. [Dipt.]

1511.—Mercier, L. *Geomyza sabulosa* Hal., microdiptère à ailes réduites; perte de la faculté du vol chez cette espèce selon le processus drosophilien. C.R. Acad. Sci. Paris **179** 1924 pp. 221–223. [Dipt.]

1512.—Mercier, L. Action des vapeurs de naphtaline sur *Calliphora erythrocephala* Meig. Etude des lésions microscopiques présentées par les individus mal formés. C.R. Acad. Sci. Paris **179** 1924 pp. 1202–1205 4 figs.

1513.—Mertens, R. Beobachtungen an einigen Orthopteren Rumäniens. Intern. ent. Zs. Guben **17** 1924 pp. 190–193.

1514.—Metalnikov, S. Influence du système nerveux sur l'immunisation. C.R. Acad. Sci. Paris **178** 1924 pp. 671–673.

1515.—Metalnikov, S. Sur l'hérédité de l'immunité acquise. C.R. Acad. Sci. Paris **179** 1924 pp. 514–516.

Metalnikov, S. *see* Ishimori & Metalnikov; *also* Kostritsky, Toumanoff & Metalnikov.

1516.—Metschl, C. & **Salzl,** M. Die Schmetterlinge der Regensburger Umgebung. 1 Teil: Gross-schmetterlinge. Ber. natw. Ver. Regensburg **16** 1923 pp. 1–99. [Lep.]

1517.—Metz, C. W. & **Nonidez,** J. F. The behaviour of the nucleus and chromosomes during spermatogenesis in the robber-fly *Lasiopogon bivittatus*. Biol. Bull. Wood's Hole Mass. **46** 1924 pp. 153–164 1 pl. [Dipt.]

1518.—Meyrick, E. Exotic Microlepidoptera. Marlborough **3** pts. 1–2 1923, pts. 3–4 1924 128 pp.

1519.—Meyrick, E. Micro-lepidoptera of Rodriguez. Trans. Ent. Soc. London **1923** 1924 pp. 544–557.

1520.—Meyrick, E. Zoological Results of the Swedish Expedition to Central Africa 1921. Insecta 4. Microlepidoptera. Ark. Zool. Stockholm **16** 1924 no. 14 pp. 1–4.

1521.—Meyrick, E. A new Tortricid from South Brazil (Lep.). Ent. Mitt. Berlin **13** 1924 p. 117.

1522.—Meyrick, E. Lepidoptera of the Siju Cave. II. Tineidae. Rec. Ind. Mus. Calcutta **26** 1924 p. 114.

1523.—Meyrick, E. Notes and descriptions of New Zealand Lepidoptera. Trans. N.Z. Inst. Wellington **55** 1924 pp. 202–206, 661–662.

1524.—Meyrick, E. Voyage du comte Jacques de Rohan-Chabot dans l'Angola. Description d'espèces nouvelles de Microlépidoptères. Bull. Mus. Hist. nat. Paris **1923** pp. 563–566. [Lep.]

1525.—Michael, H. Über den Bau der Geschlechtsapparate und die Kopulation von *Bombyx mori*. Arch. Natg. Berlin Abt. A **89** (1923) 1924 Heft 12 pp. 25–55 26 figs. [Lep.]

1526.—Mickel, C. E. A revision of the Mutillid wasps of the genera *Myrmilloides* and *Pseudomethoca* occurring in America north of Mexico. Proc. U.S. Nat. Mus. Washington **64** 1924 art. 15 no. 2505 51 pp. 4 pls. [Hym.]

1526a.—Mickel, C. E. An analysis of a bimodal variation in size of the parasite *Dasymutilla bioculata* Cresson (Hymen.: Mutillidae). Ent. News Philadelphia **35** 1924 pp. 236–242 1 fig. 1 graph.

1527.—Miles, H. W. On the life-history of *Boriomyia* (*Hemerobius*) *nervosa*, Fab. (Planipennia Hemerobiidae). Bull. Ent. Res London **14** 1924 pp. 249–250.

1528.—Miller, D. Material for a monograph on the Diptera fauna of New Zealand: Part 2, Family Syrphidae, Supplement A. Trans. N. Z. Inst. Wellington **55** 1924 pp. 281–284.

1529.—Minnich, D. E. The olfactory sense of the cabbage butterfly, *Pieris rapae* Linn., an experimental study. J. Exp. Zool. Philadelphia **39** 1924 pp. 339–356 1 fig. [Lep.]

1530.—Misra, C. S. The Citrus White-fly, *Dialeurodes citri*, in India and its parasites, together with the life-history of *Aleyrodes ricini*, n. sp. Proc. 5th Ent. Meeting Pusa February 1923 Calcutta 1924 pp. 129–135. [Hom.]

1531.—**Mitchell,** T. B. New Megachilid bees. J. Elisha Mitchell Sci. Soc. Chapel Hill N.C. **40** 1924 pp. 154–165. [Hym.]

1532.—**Mitterberger,** K. Eine neue Kleinschmetterlingsform. Soc. ent. Stuttgart **39** 1924 pp. 41–42. [Lep.]

1533.—**Mjöberg,** E. Results of Dr. E. Mjöberg's Swedish Scientific Expeditions to Australia 1910–1913. 36. Dermaptera. Ark. Zool. Stockholm **16** 1924 no. 21 pp. 1–11 2 plates. [Orth.]

Mjöberg, E. *see* Schmitz & Mjöberg.

1534.—**Mocsáry,** A. Fauna Regni Hungariae. Pseudo-Neuroptera. Budapest 1918 pp. 23–32.

1535.—**Mocsáry,** A. Fauna Regni Hungariae. Neuroptera. Budapest 1918 pp. 33–34.

1536.—**Mocsáry,** A. Fauna Regni Hungariae. Hymenoptera. Budapest 1918 pp. 7–113.

1537.—**Mohr,** O. L. A genetic and cytological analysis of a section deficiency involving four units of the X-chromosome in *Drosophila melanogaster*. Zs. indukt. Abstammgslehre Berlin **32** 1924 pp. 108–232 1 pl. 8 figs. [Dipt.]

1538.—**Mokrzecki,** S. A. Sur la biologie de quelques nouveaux insectes aux Rosiers en Bulgarie (*Agrilus foveicollis* Mars. et *Serysta parreyssi* Spin.). Trav. Soc. bulgar. Sci. nat. Sofia **9** 1921 pp. 117–126 figs. [In Bulgarian.] [Col.; Hym.]

1539.—**Mordvilko,** A. K. Aphidodea II. Faune Russie. Insecta Hemiptera Petrograd **1** 1919 pp. 237–508 55 figs. [Hom.] [In Russian.]

1540.—[**Mordvilko,** A. K.] Мордвилко, А. К. Кровяная Тля биология и распространение. [*Eriosoma lanigerum*, Hausm. Biology and Distribution.] Труды отдела Прикладной Энт. [Trans. Dept. App. Ent.], Leningrad **12** no. 3 1924 110 pp. 4 pls. [Hom.] [German summary.]

1541.—**Moreau,** E. Description de *Papilio maroni* ♂ de Guyàne française Bull. Soc. ent. France Paris **1924** pp. 93–94 1 pl. [Lep.]

1542.—**Moreira da Costa Lima,** A. Sobre a broca do café (*Stephanoderes coffeae*, Hag.) Chacaras e Quintaes S. Paulo **30** 1924 pp. 316–319, 413–416 1 fig. [Col.]

1543.—**Morison,** G. D. Notes on some Thysanoptera from the Aberdeen area. Scot. Nat. Edinburgh **1924** pp. 163–164.

1544.—**Morley,** B. Notes on Melanism in the West Riding of Yorkshire. Entomologist London **57** 1924 pp. 109–112.

1545.—**Morley,** C. Notes on Braconidae: XIII.—Dacnusides. Entomologist London **57** 1924 pp. 193–198, 250–255. [Hym.]

1546.—**Morrison,** H. The Coccidae of the Williams Galapagos Expedition. Zoologica New York **5** 1924 pp. 143–152 5 figs. [Hem.]

1547.—**Morrison,** H. Synonymical notes on two species of *Aulacaspis* (Hemiptera: Coccidae). Proc. Ent. Soc. Washington **26** 1924 pp. 231–232.

1548.—**Morse,** A. P. Researches on North American Acridiidae. Carnegie Inst. Washington Pubn. no. **18** 1904 55 pp. 8 pls. 13 figs. [Orth.]

1549.—**Morse,** E. S. The synchronous flashing of fireflies. Science Garrison N.Y. **59** 1924 pp. 163–164. [Col.]

1550.—**Morstatt,** H. Bibliographie der Pflanzenschutzliteratur. Das Jahr 1923. Berlin Biol. Reichsant. Land- u. Forstw. 1924 iv + 176 pp.

1551.—**Morstatt,** H. Von der Lackkultur in Indien. Naturwissenschaften Berlin **12** 1924 pp. 118–119. [Hom.]

1552.—**Morton,** K. J. The dragonflies (Odonata) of Palestine, based primarily on collections made by Dr. P. A. Buxton, with notes on the species of the adjacent regions. Trans. Ent. Soc. London **1924** pp. 25–44 3 figs.

1553.—**Morton,** K. J. A new genus and new species of dragonflies from East Africa belonging to the Legion *Podagrion* (Odonata). Entomologist London **57** 1924 pp. 217–220 1 fig.

1554.—**Morton,** K. J. Rept. Sci. Res. Norweg. Exped. Novaya Zemlya 1921 no. 16. Plecoptera. Christiania 1923 pp. 1–6 5 figs.

1555.—Mosely, M. E. Scent-organs in the genus *Hydroptila* (Trichoptera). Trans. Ent. Soc. London **1923** 1924 pp. 291–294 2 pls. 2 figs.

1556.—Mosely, M. E. New Zealand Hydroptilidae (Order Trichoptera). Trans. N.Z. Inst. Wellington **55** 1924 pp. 670–673 15 figs.

1557.—Moser, J. Beitrag zur Kenntnis der Melolonthiden (Col.), xiii & xiv. Stettin. ent. Ztg. **84** (1923) 1924 pp. 114–136 & 137–164.

1558.—Moser, J. Drei neue Cetoniden-Arten (Col.). Stettin. ent. Ztg. **84** (1923) 1924 pp. 165–168.

1559.—Moser, J. Neue Melolonthiden und eine neue Cetonide vom Congo belge (Col., Lamell.). D. ent. Zs. Berlin **1924** pp. 162–171.

1560.—Moser, J. New species of Melolonthid beetles from the Philippine Islands. Phil. J. Sci. Manila **25** 1924 pp. 349–357. [Col.]

1561.—Mosher, F. H. & Holbrook, J. E. R. A device for inflating larvae. J. Econ. Ent. Geneva N.Y. **17** 1924 pp. 408–411 1 pl.

1562.—Motas, C. Sur la manière dont se comporte *Ranatra* décapitée. Ann. sci. Univ. Jassy **13** 1924 pp. 112–118 1 fig. [Hem.]

1563.—Mothersole, H. Some observations on the leaf-cutting bee (*Megachile*) and its parasite (*Coelioxys*). Essex Nat. Stratford **21** 1924 pp. 27–31 2 figs. [Hym.]

1564.—Mousley, H. Further notes on the Rhopalocera or butterflies of Hatley, Stanstead County, Quebec, 1923. Canad. Field Nat. Ottawa **38** 1924 pp. 82–83.

1565.—Muir, F. New and little known Fulgorids from the West Indies (Homoptera). Proc. Hawaiian Ent. Soc. Honolulu **5** 1924 pp. 461–472 1 pl.

1566.—Muir, F. An American Tettigometrid (Homoptera). Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 219–222 6 figs.

1567.—Muir, F. Notes on some genera of Derbidae (Homop.). Proc. Ent. Soc. Washington **26** 1924 pp. 15–19.

1568.—Muir, F. A new genus of the family Achilixiidae (Homoptera). Canad. Ent. Orillia **56** 1924 pp. 33–34 1 fig.

1569.—Muir, F. New Malayan species of *Oliarus* Stål (Cixiidae, Homoptera). Philipp. J. Sci. Manila **24** 1924 pp. 509–527 2 pls.

1570.—Muir, F. On some new and little-known Australian Fulgoroidea (Homoptera). Mem. Queensland Mus. Brisbane **8** 1924 pp. 29–36 6 figs.

1571.—Muir, F. On a new Cixiid attacking coconut palms (Homopt.). Bull. Ent. Res. London **14** 1924 p. 456 1 fig.

1572.—Muir, F. & Giffard, W. M. Studies in North American Delphacidae (Homoptera). Hawaiian Sugar Plant. Assoc. Honolulu Ent. Ser. Bull. **15** 1924 53 pp. 5 pls.

1573.—Müller, A. Dipterologische Mitteilungen. I–III. Verh. zool.-bot. Ges. Wien **73** (1923) 1924 pp. 51–97 52 figs.; pp. 98–111 27 figs.

1574.—Müller, G. Secondo contributo alla conoscenza del genere *Staphylinus* L. Boll. Soc. ent. ital. Genoa **56** 1924 pp. 19–27. [Col.]

1575.—Müller, G. Nuovi coleotteri paleartici. Boll. Soc. ent. ital. Genoa **56** 1924 pp. 68–80.

1576.—Müller, G. Una nuova *Chrysomela*. Boll. Soc. ent. ital. Genoa **56** 1924 p. 118. [Col.]

1577.—Müller, O. H. Das Schlüpfen der Odonaten. Zs. Morph. Oekol. Tiere Berlin **3** 1924 pp. 188–196.

1578.—Müller-Rutz, J. Ueber die beiden Wicklerarten *Acalla hastiana* L. und *hippophaëana* Heyd. Mitt. schweiz. ent. Ges. Bern **13** 1924 pp. 349–355. [Lep.]

1579.—Munro, H. K. A new genus and species of Syrphidae (Diptera) from South Africa. Ann. Transvaal Mus. Pretoria **10** 1924 pp. 87–88 1 pl.

1580.—Munster, T. Om Nogle Haliplider (Coleoptera). Skr. Vid. selsk. Kristiania **1922** 1923 no. 9 pp. 1–16.

1581.—Munster, T. Verdens nordligste *Cicindela*. Norsk Ent. Tidsskr. Christiania **1** (1923) 1924 pp. 283–288. [Col.]

1582.—Munster, T. Nova etc. ex Norvegia. Norsk Ent. Tidsskr. Christiania **1** (1923) 1924 pp. 288–294 2 figs. [Col.]

1583.—Munster, T. Report of the Second Norwegian Arctic Expedition in the "Fram," 1898–1902. Coleoptera, Supplement. Norsk Ent. Tidsskr. Christiania **1** (1923) 1924 p. 297.

1584.—Mutchler, A. J., and Weiss, H. B. The oil and blister beetles of New Jersey. N. J. State Dept. Agric. Trenton N.J. Circ. **76** 1924 19 pp. 6 figs. [Col.]

1585.—Muttkowski, R. A. Studies on the blood of Insects. II and III. Bull. Brooklyn Ent. Soc. **19** 1924 pp. 4–19 1 pl. pp. 128–144 2 pls.

1586.—Myers, J. G. The New Zealand plant-hoppers of the Family Cixiidae (Homoptera). Trans. N.Z. Inst. Wellington **55** 1924 pp. 315–326 5 pls.

1587.—Myers, J. G. On the systematic position of the family Termitaphididae (Hemiptera, Heteroptera), with a description of a new genus and species from Panama. Psyche Boston **31** 1924 pp. 259–278 1 pl.

1588.—Myers, P. R. The identity of *Nemicromelus fulvipes* (Forbes), a common Hessian fly parasite (Hymenoptera). Proc. Ent. Soc. Washington **26** 1924 pp. 222–224.

1589.—Nagel, P. A new form of Lucanoid Coleoptera. Pan-Pacific Ent. S. Francisco **1** 1924 p. 72 1 fig.

1590.—Nakahara, W. An interesting new *Papilio* from Saghalien. Bull. Brooklyn Ent. Soc. **19** 1924 pp. 38–39. [Lep.]

1591.—Nakahara, W. A revision of the genus *Basilarchia* (Rhopalocera : Nymphalidae). Bull. Brooklyn Ent. Soc. **19** 1924 pp. 166–180 10 figs.

Nakahara, W. *see* Esaki and Nakahara.

1592.—Nath, V. Egg-follicle of *Culex*. Q. J. Microsc. Sci. London **69** 1924 pp. 152–175 2 pls. [Dipt.]

1593.—Natvig, L. R. Fakultativ parasitisme av *Eristalis*-larver hos en ko. Norsk Vet.-Tidsskr. Christiania **1924** separate 11 pp. 1 fig. [Dipt.] [With an English summary.]

1594.—Naude, T. J. A new Jassid. S.Afr.J. Nat. Hist. Pretoria **4** 1924 p. 307. [Hom.]

1595.—Navás, L. Sinopsis de los Paraneurópteros (Odonatos) de la península ibérica. Memorias Soc. ent. España Saragossa no. **1** 1924 69 pp. 5 figs.

1596.—Navás, L. Crisópidos (Neur.) de Cuba. Bol. Soc. ent. España Saragossa **7** 1924 pp. 51–53.

1597.—Navás, L. Nueva especie de Neurópteros de la fauna española. Bol. Soc. ent. España Saragossa **7** 1924 pp. 106–108 1 fig.

1598.—Navás, L. Insectos de la América Central. Broteria Caminha Ser. Zool. **21** 1924 pp. 55–86 22 figs.

1599.—Navás, L. Sur des Névroptères nouveaux ou critiques (sixième série). Ann. Soc. sci. Bruxelles C.R. **42** 1922 pp. 166–173.

1600.—Navás, L. Quelques Myrméléonides (Ins. Nevr.) d' Afrique. Ann. Soc. sci. Bruxelles C.R. **43** 1923 pp. 143–147.

1601.—Navás, L. Quelques insectes de l'Amérique méridionale. Ann. Soc. sci. Bruxelles C.R. **43** 1924 pp. 249–254 2 figs.

1602.—Navás, L. Névroptères d'Afrique. Ann. Soc. sci. Bruxelles C.R. **43** 1924 pp. 375–380 4 figs.

1603.—Navás, L. Préservation des insectes dans les collections. Rev. mens. Soc. ent. Namur **24** 1924 pp. 9–10.

1604.—Navás, L. Contributions à la faune de Belgique et de Hollande. Rev. mens. Soc. ent. Namur **23** 1923 pp. 53–55 ; **24** 1924 pp. 61–63. [Neur.]

1605.—Navás, L. Neue Trichopteren Zweite Serie. Konowia Vienna **3** 1924 pp. 204–209 2 figs.

1606.—Navás, L. Zoological Results of the Swedish Expedition to Central Africa 1921. Insecta. 3. Neuroptera et Mecoptera. Ark. Zool. Stockholm **16** 1924 no. 13 pp. 1–3.

1607.—Navás, L. Crisópidos (Ins. Neur.) neotrópicos. Rev. chil. Hist. nat. Santiago **27** (1923) 1924 pp. 110–116 4 figs.

1608.—Needham, J. G. Observations on the life of the ponds at the head of Laguna Canyon. J. Ent. & Zool. Claremont Cal. **16** 1924 pp. 1–12 1 fig.

1609.—Needham, J. G. The male of the parthenogenetic may-fly, *Ameletus ludens.* Psyche Boston **31** 1924 pp. 308–310. [Ephem.]

1610.—Nelson, J. A. Morphology of the honeybee larva. J. Agric. Res. Washington **28** 1924 pp. 1167–1214 8 pls. 5 figs.

1611.—Neresheimer, J. & Wagner, H. Beiträge zur Coleopterenfauna der Mark Brandenburg. xii. D. ent. Zs. Berlin **1924** pp. 153–161 2 figs.

1612.—Newcomer, E. J. & Whitcomb, W. D. Life-history of the codling moth in the Yakima Valley of Washington. U.S. Dept. Agric. Washington Dept. Bull. **1235** 1924 76 pp. 3 pls. 35 figs. [Lep.]

1613.—Newstead, R., Evans, A. M. & Potts, W. H. Guide to the Study of Tsetse-flies. Liverpool School Trop. Med. Mem. N.S. **1** 1924 i–xi + 268 pp. 4 maps 28 pls. 59 figs. [Dipt.]

1614.—Nicolas, A. Nouvelles variétés et aberrations de Carabes. Misc. ent. Uzès **24** 1919 pp. 84–86. [Col.]

1615.—Nicolas, A. *Isiocarabus fiduciarius* J. T. subsp. *chusanensis.* Misc. ent. Castanet-Tolosan **28** 1924 p. 2. [Col.]

1616.—Nicolas, A. Nouvelle variété de *Carabus violaceus* du plateau d'Asiago, var. *poussielguei* (Col., Carabidae). Misc. ent. Castanet-Tolosan **28** 1924 pp. 34–35.

1617.—Niepelt, W. Neue u. wenig bekannte exotische Rhopaloceren. Intern. ent. Zs. Guben **17** 1924 p. 137. [Lep.]

1618.—Niepelt, W. Neue Formen exotischer Rhopaloceren. Intern. ent. Zs. Guben **18** 1924 pp. 49–50. [Lep.]

1619.—Niepelt, W. Ein neuer *Papilio* von Halmaheira. Intern. ent. Zs. Guben **18** 1924 pp. 69–70. [Lep.]

1620.—Niepelt, W. Neue Nymphaliden von Columbien. Intern. ent. Zs. Guben **18** 1924 p. 189. [Lep.]

1621.—Niepelt, W. Neue Formen palaearktischer Rhopaloceren. Intern. ent. Zs. Guben **18** 1924 p. 189. [Lep.]

1622.—Niesiolowski, W. *Hemaris fuciformis* L. und *Hemaris tityus* L. Einige Worte die Nomenklatur betreffend. Polsk. Pismo ent. Lemberg **3** 1924 pp. 23–33. [Lep.]

1623.—Niesiolowski, W. & Prüffer, J. Matériaux pour servir à la faune lépidoptèrologique de la Pologne. Polsk. Pismo ent. Lemberg **2** 1924 pp. 159–171.

1624.—Nitsche, J. *Eucosmia certata* L. ab. nov. *rebeli.* Verh. zool.-bot. Ges. Wien **73** (1923) 1924 p. (108). [Lep.]

1625.—Nitzulesco, V. Contribution à l'étude des Culicides; denticulation des maxilles de *Culex pipiens.* Ann. sci. Univ. Jassy **13** 1924 pp. 194–198 2 figs. [Dipt.]

Nonidez, J. F. *see* Metz & Nonidez.

1626.—Nordström, F. Släktet *Oporinia* Hb. i Sverige. Ent. Tidsk. Stockholm **45** 1924 pp. 182–190 1 pl. [Lep.] [With an English summary.]

1627.—Noskiewicz, J. Neue für Polens Fauna und seltenere Hymenopteren. Polsk. Pismo ent. Lemberg **2** 1924 pp. 176–186.

1628.—Noskiewicz, J. *Nomada dzieduszyckii* n. sp. (Apidae, Hymenotera). Polsk. Pismo ent. Lemberg **3** 1924 pp. 34–37. [In German.]

1629.—Noskiewicz, J. *Colletes annulicornis* Mor. ♂ (Hym.). Polsk. Pismo ent. Lemberg **3** 1924 pp. 102–104.

1630.—Notman, H. A new Xantholinid swarming on gravestones on Staten Island and a new *Trogophloeus* (Coleoptera: Staphylinidae). J. New York Ent. Soc. **32** 1924 pp. 71–72.

1631.—Nuñez Tovar, M. Indice Dipterologico de Venezuela. Con la distribución geográfica por Estados. Trab. Contrib. 4° Congreso Venez. Med. Caracas **1924** 14 pp.

1632.—Nuñez Tovar, M. Mosquitos y Flebotomos de Venezuela. Trab. Contrib. 4° Congreso Venez. Med. Caracas **1924** 46 pp. 10 pls. [Dipt.]

1633.—Obenberger, J. Sphenopterarum Africae borealis decades duae. (Col., Buprestidae). Casopis, Prague **20** 1923 pp. 113–125.

1634.—Obenberger, J. Entomologie na lyžích. [Entomology in the Snow.] Casopis Prague **20** 1923 pp. 126–127 2 figs. [Dipt.]

1635.—Obenberger, J. Symbolae ad specierum regionis palaearcticae Buprestidarum cognitionem Ceskoslov. ent. spolecnosti Jubilejni Sbornik Prague **1924** pp. 6–59 1 pl. 4 figs. [Col.]

1636.—Obenberger, J. Bemerkungen zur Gattung *Paratrachys* E. Saunders (Col., Buprestidae). N. Beiträge system. Insektenk. Berlin **3** 1924 pp. 11–12.

1637.—Obenberger, J. Kritische Studien über die Buprestiden (Col.). Arch. Natg. Berlin **90** 1924 Abt. A Heft 3 pp. 1–171.

1638.—Obenberger, J. Zwei neue Prachtkäfer von Sumatra und Celebes (Col., Buprest.). Treubia Buitenzorg **6** 1924 pp. 26–27.

1639.—Obenberger, J. A study of the Buprestidae, collected by Charles Fuller Baker in Singapore, Borneo, and the Philippine Islands. Phil. J. Sci. Manila **25** 1924 pp. 539–660 4 pls. [Col.]

1640.—Oberthür, C. Le genre *Agrias*. Études Lép. Rennes **22** pt. 1 1924 pp. 11–84 pls. [Lep.]

1641.—Ochs, G. Ueber neue und interessante Gyriniden aus dem British Museum in London. Ent. Bl. Berlin **20** 1924 pp. 228–244. [Col.]

1642.—Ochs, G. On the West Indian Gyrinidae and a new species of *Gyretes* from Northern Brazil. Amer. Mus. Novit. New York no. **125** 1924 pp. 1–8. [Col.]

1643.—Ochs, G. Gyrinidae of the Philippine Islands. Philipp. J. Sci. Manila **24** 1924 pp. 81–86. [Col.]

1644.—Oertel, R. Studien über Rudimentation ausgeführt an den Flügelrudimenten der Gattung *Carabus*. Zs. Morph. Oekol. Tiere Berlin **1** 1924 pp. 38–120 54 figs. [Col.]

1645.—Oertel, R. Zur Terminologie des Adephagenflugels. Zs. Morph. Oekol. Tiere Berlin **1** 1924 pp. 793–830 7 figs. [Col.]

1646.—Ogloblin, A. A. Novy druh rodu *Prenanteon* (Anteoninae, Proctotrupidae, Hym.) z Vysokych Tater. [A new *Prenanteon* from the High Tatra.] Ceskoslov. ent. spolecnosti Jubilejni Sbornik Prague **1924** pp. 102–106 3 figs. [Description in English.]

1647.—Ohaus, F. xxii. Beitrag zur Kenntnis der Ruteliden (Col., Lamell.) Stettin. ent. Ztg. **84** (1923) 1924 pp. 167–178 14 figs.

1648.—Ohaus, F. Neue Geniatinen iii. (Col., Lamell., Rutelin.). Stettin. ent. Ztg. **84** (1923) 1924 pp. 179–186 8 figs.

1649.—Ohaus, F. Einige neue *Anomala*-arten der Philippinen. Philipp. J. Sci. Manila **24** 1924 pp. 53–55. [Col.]

1650.—Ohaus, F. Eine neue philippinische *Euchlora*-art (Coleoptera-Rutelidae). Philipp. J. Sci. Manila **24** 1924 p. 103 1 fig.

1651.—Okamoto, H. Studies on the Japanese Chrysopidae. Hokkaido Agric. Expt. Sta. Sapporo Rept. **9** 1919 76 pp. 7 pls. [Neur.]

1652.—Okamoto, H. The Insect Fauna of Quelpart Island (Saishiu-to). Bull. Agric. Expt. Sta. Govt. Gen. Chosen, Suigen, Korea **1** 1924 pp. 47–233 4 pls. 1 map.

1653.—Okamoto, H. & Kuwayama, S. A contribution to our knowledge of the Corrodentia-Fauna of South Saghalien. Ann. Mag. Nat. Hist. (9) **14** 1924 pp. 486–489 1 pl. [Psocoptera.]

1654.—Oke, C. Notes on the Victorian Chlamydopsini (Coleoptera), with descriptions of new species. Vict. Nat. Melbourne **40** 1923 pp. 152–162.

1655.—Oke, C. Notes on the Natya district. Vict. Nat. Melbourne **41** 1924 pp. 7–18.

1656.—Oldenberg, L. Ueber einige *Tachydromia*-(*Cqryneta*-) Arten. (Dipt.) Ent. Mitt. Berlin **13** 1924 pp. 84–89.

1657.—Oldenberg, L. Die Empididen v. Rosers in Stuttgart (Dipt.). D. ent. Zs. Berlin **1924** pp. 226–236.

1658.—Olsoufieff, G. Note sur un Coléoptère ectoparasite du Desman. Bull. Soc. ent. France Paris 1924 pp. 94–96.

1659.—d'Olsoufieff, G. Les Phanaeides (Coleoptera, Lamellicornia, Famille Scarabaeidae, Tr. Coprini). Insecta Rennes **13** (1923) 1924 pp. 5–202 8 pls. 7 maps 40 figs.

1660.—O'Mahony, E. G. *Athous difformis* Lac., and other beetles in County Dublin. Irish Nat. Dublin **33** 1924 pp. 121–122.

1661.—Orbigny, H. Scarabaeidae. Onthophagini et Oniticellini. Voy. Babault Afrique or. angl. Paris **1916** pp. 1–31 3 pls. [Col.]

1662.—d'Orchymont, A. Remarques au sujet de quelques Helophorinae (Col. Hydrophilidae). Bull. Soc. ent. Belg. Brussels **6** 1924 pp. 91–109.

1663.—Orlov, J. Die Innervation des Darmes der Insekten. (Larven von Lamellicorniern.) Zs. wiss. Zool. Leipzig **122** 1924 pp. 425–502 15 figs. 3 pls. [Col.]

1664.—Orlova, A. I. Observations sur la parthénogénèse de l'*Hemiteles areator* Panz. La Défense des Plantes Leningrad **1** 1924 pp. 116–124 6 figs. [Hym.] [In Russian.]

1665.—Ormiston, W. The butterflies of Ceylon. Colombo 1924 143 pp. 7 pls.

1666.—Osborn, H. Neotropical Homoptera of the Carnegie Museum. Ann. Carnegie Mus. Pittsburg **15** 1924 pp. 383–462 5 pls.

1667.—Osborn, H. Homoptera of the Williams Galapagos Expedition. Zoologica New York **5** 1924 pp. 77–79.

1668.—Oshanin, B. F. Cixiidae : Orgeriaria. Faune Russie. Insecta Hemiptera St. Petersburg **3** Livr. 1 1913 pp. 1–113 1 pl. 7 figs. [In Russian.]

1669.—Overbeck, H. A list of ants of Singapore and some neighbouring places. J. Malayan Branch R. Asiat. Soc. Singapore **2** 1924 pp. 25–40. [Hym.]

Painlevé, J. *see* Parat and Painlevé.

1670.—Pallary, P. Les origines de la faune marocaine. Bull. Soc. Hist. nat. Afr. N. Algiers **14** 1923 pp. 275–290.

1671.—Palmer, L. S. & Knight, H. H. Carotin—the principal cause of the red and yellow colours in *Perillus bioculatus* (Fab.), and its biological origin from the lymph of *Leptinotarsa decemlineata* (Say). J. Biol. Chem. New York **59** 1924 pp. 443–449.

1672.—Palmer, L. S. & Knight, H. H. Anthocyanin and flavone-like pigments as cause of red colorations in the Hemipterous families Aphididae, Coreidae, Lygaeidae, Miridae and Reduviidae. J. Biol. Chem. New York **59** 1924 pp. 451–455.

Palmer, M. A. *see* Gillette & Palmer.

1673.—Paramonow, S. J. Zwei neue Bombyliden-Arten (Diptera) aus Transkaspien. Konowia Vienna **3** 1924 pp. 136–139 2 figs.

1674.—Paramonow, S. J. Eine neue Art der Gattung *Fallenia* (Nemestriniidae, Diptera) aus Persien. Konowia Vienna **3** 1924 pp. 149–151.

1675.—Paramonow, S. J. Zwei neue Syrphiden-Arten (Diptera) aus dem südwestlichen Russland. Konowia Vienna **3** 1924 pp. 249–252.

1676.—Paramonow, S. J. Zur Kenntnis der Gattung *Lomatia* (Bombyliidae, Diptera). (Mit einer Bestimmungstabelle für die ♂ ♂ der paläark tischen Arten.) N. Beitr. syst. Insektenk. Berlin **3** 1924 pp. 41–46.

1677.—Parat, M. & Painlevé, J. Constitution du cytoplasme d'une cellule glandulaire : la cellule des glandes salivaires de la larve du Chironome. C.R. Acad. Sci. Paris **179** 1924 pp. 543–544.

1678.—Parat, M. & Painlevé, J. Observation vitale d'une cellule glandulaire en activité. Nature et rôle de l'appareil réticulaire interne de Golgi et de l'appareil de Holmgren. C.R. Acad. Sci. Paris **179** 1924 pp. 612–614 8 figs. [Dipt.]

1679.—Parent, O. Étude sur les genre *Chrysotus* (Diptères, Dolichopodides). Ann. Soc. sci. Bruxelles Mém. **42** 1923 pp. 281–312.

1680.—Parent, O. Étude sur les espèces du genre *Lamprochromus* (Dipt.). Ann. Soc. sci. Bruxelles C.R. **43** 1924 pp. 242–248.

1681.—Parent, O. Nouvelle contribution à la faune diptérologique de Belgique (Dolichopodides). Ann. Soc. sci. Bruxelles C.R. **43** 1924 pp. 380–383. [Dipt.]

1682.—Parent, O. Essai sur les *Tachytrechus* de la faune française. Encyc. ent. Ser. B **2** Dipt. **1** Paris Lechevalier 1924 pp. 19–64. [Col.]

1683.—Parker, J. B. & Böving, A. G. The blister beetle *Tricania sanguinipennis*—biology, descriptions of different stages, and systematic relationship. Proc. U.S. Nat. Mus. Washington **64** 1924 art. 23 no. 2513 pp. 1–40 5 pls.

Parker, S. L. *see* Pearl & Parker.

1684.—Parshley, H. M. A note on *Aradus debilis* Uhler (Hemiptera: Aradidae). Bull. Brooklyn Ent. Soc. **19** 1924 pp. 145–146.

1685.—Parshley, H. M. A controversial note on some species of *Lygaeus* (Hemiptera, Lygaeidae). Canad. Ent. Orillia **56** 1924 pp. 18–19.

1686.—Patch, E. M. Aphids with branched cornicles (Homop.). Ent. News Philadelphia **35** 1924 pp. 331–332 3 figs.

1687.—Patkiewicz, R. Les Coléoptères plus rares ou neufs pour la faune de la Pologne. Polsk. Pismo ent. Lemberg **2** 1924 pp. 186–188. [In Polish.]

1688.—Patton, W. S. *Gasterophilus crossi* sp. nov. parasitic in its larval stage in the stomach of the horse in the Punjab. Ind. J. Med. Res. Calcutta **11** 1924 pp. 961–963. [Dipt.]

1689.—Patton, W. S. & Senior-White, R. The Oriental species of the genus *Musca* Linnaeus. Rec. Ind. Mus. Calcutta **26** 1924 pp. 553–577 5 pls. [Dipt.]

Pável, J. *see* Abafi-Aigner, Pável & Uhryk.

1690.—Pawlowsky, E. N. On the anatomy of *Phymateus hildebrandti* (Orthoptera, Phymatelidae) in connection with the peculiarities of its dermal secretion. *In*: Dogiel & Sokolow Sci. Results Zool. Exped. B.E. Africa & Uganda in 1914 **2** 1916 no. 1 28 pp. 12 figs. [Also in Russian.]

1691.—Pawlowsky, E. N. 1. Bemerkungen über zoologische Methodik. Zool. Anz. Leipzig **59** 1924 pp. 284–287 1 fig.

1692.—Payne, F. Cross-over modifiers in the third chromosome of *Drosophila melanogaster*. Genetics Brooklyn **9** 1924 pp. 327–342 1 fig. [Dipt.]

1693.—Peacock, A. D. On the males and an intersex-like specimen of the parthenogenetic saw-fly *Pristiphora pallipes*, Lep. Brit. J. Exper. Biol. Edinburgh **1** 1924 pp. 391–412 2 pls. [Hym.]

1694.—Pearce, E. J. On the specific distinctions of *Haliplus obliquus* F. and *Haliplus confinis* Steph. Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 29–33 2 figs. [Col.]

1695.—Pearl, R. Starvation life curves. Nature London **113** 1924 p. 854. [Dipt.]

1696.—Pearl, R. & Parker, S. L. Experimental studies on the duration of life. IX. New life tables for *Drosophila*. X. The duration of life of *Drosophila melanogaster* in the complete absence of food. Amer. Nat. New York **58** 1924 pp. 71–80, 193–218.

1697.—Pearman, J. V. A new species of *Caecilius* (Psocoptera). Ent. Mo. Mag. London **60** 1924 pp. 58–61 3 figs.

1698.—Pearman, J. V. Two Psocids new to Britain. Ent. Mo. Mag. London **60** 1924 pp. 121–124 6 figs. [Psocop.]

1699.—Pehani, H. Die Reifung der Geschlechtszellen bei Phasmiden (Vorläufige Mitteilung). Biol. Zentralbl. Leipzig **44** 1924 pp. 422–428 6 figs.

1700.—Peile, H. D. Some butterflies in a Persian garden. Entomologist London **57** 1924 pp. 169–177.

1701.—Penecke, K. A. Zwei neue Rüsselkäfer aus Thessalien. Wiener ent. Ztg. Vienna **41** 1924 pp. 13–16. [Col.]

1702.—Penecke, K. A. *Trachyphloeus thessalicus* sp. nov. (Col. Curcul.). Wiener ent. Ztg. Vienna **41** 1924 pp. 85–86.

1703.—Penecke, K. A. Eine neue *Tropiphorus*-Art aus der Verwandtschaft des *Tr. carinatus* Müll. (Col. Curcul.). Wiener ent. Ztg. Vienna **41** 1924 pp. 110–113.

1704.—Peringuey, L. The distribution of life in the Southern hemisphere: The entomological side of Wegener's theory. Proc. R. Soc. S. Africa Cape Town **12** 1924 pp. cxxii–cxxv.

1705.—Perkins, R. C. L. The Aculeate Hymenoptera of Devon. Rept. Trans. Devon. Ass. Plymouth **55** (1923) 1924 pp. 188–241.

1706.—Perkins, R. C. L. Additional notes on *Stylops*. Ent. Mo. Mag. London **60** 1924 pp. 151–153. [Col.]

1707.—Perkins, R. C. L. A new Hawaiian *Rhyncogonus* (Coleoptera, Rhynchophora). Proc. Hawaiian Ent. Soc. Honolulu **5** 1924 pp. 379–380.

1708.—Permentier, R. de. Coloration artificielle des Lépidoptères. Rev. mens. Soc. ent. Namur **28** 1924 pp. 69–71.

1709.—Peschet, R. Mission Rohan-Chabot dans l'Angola et dans la Rhodésia (1914). Description de Dytiscides nouveaux. Bull. Mus. Hist. nat. Paris **1924** pp. 140–144. [Col.]

1710.—Petch, T. Notes on *Aristolochia* [Insect visitors]. Ann. R. Bot. Gdns. Peradeniya **8** 1924 pp. 1–108 1 pl.

1711.—Petersen, A. Bidrag til de Danske Simuliers Naturhistorie. D. kgl. danske Vidensk. Skrifter Naturv. og mathem. Afd. Copenhagen (8) **5** no. 4 1924 pp. 237–339 2 pls. 54 figs. [Dipt.]

1712.—Petkoff, P. Bestimmung der Konturen-Variabilität bei Schmetterlings flügeln. Trav. Soc. bulgar. Sci. nat. Sofia **5** 1912 pp. 142–151. [Lep.] [In Bulgarian; summary in German.]

1713.—Petkoff, P. Remarques entomologiques. Trav. Soc. bulgar. Sci. nat. Sofia **6** 1914 pp. 99–104 figs. (Lep., Odonata.) [In Bulgarian; summary in French.]

1714.—Petkoff, P. Der Mechanismus der Ausstreckung der Flügel bei Schmetterlingen. Trav. Soc. bulgar. Sci. nat. Sofia **9** 1921 pp. 95–102 figs. [In Bulgarian; summary in German.]

1715.—Petkoff, P. Bemerkungen über die Flascherie der Seidenraupen. Trav. Soc. bulgar. Sci. nat. Sofia **9** 1921 pp. 113–116. [Lep.] [In Bulgarian; summary in German.]

Petkoff, P. *see* Todorowa & Petkoff.

1716.—Peyerimhoff, P. de. Comment recueillir les Arthropodes et plus spécialement les Insectes coléoptères. Arch. Inst. Pasteur d'Algerie **2** 1924 pp. 239–243.

1717.—Peyerimhoff, P. de. Nouveaux Coléoptères du Nord-Africain. 46e–49e notes. Bull. Soc. ent. France Paris **1924** pp. 62–67 3 figs., pp 74–78 2 figs., pp. 158–161, 170–172.

1718.—Peyerimhoff, P. Description d'un nouveau type de Silphidae (Col.) de Cyrénaique (*Eocatops*, nov. gen. *ambiguus*, n. sp.). Boll. Soc. ent. ital. Genoa **56** 1924 p. 63.

1719.—Pfankuch, K. Von den Schlupfwespen. Ent. Jahrb. Leipzig **31** 1922 pp. 143–145. [Hym.]

1720.—Pfankuch, K. Ichneumonologisches (Hym.). Konowia Vienna **2** 1923 pp. 93–97, 165–171.

1721.—Pfankuch, K. Ichneumonologische Miszellen I. Ent. Jahrb. Leipzig **33-34** 1924 pp. 134–147. [Hym.]

1722.—Pfankuch, K. Ein Beitrag zur Ichneumoniden-Fauna Nordschleswigs. Zts. wiss. Insektenbiol. Berlin **19** 1924 I pp. 53–64; II pp. 144–152; III pp. 208–216. [Hym.]

1723.—Pfankuch, K. Ichneumonologisches (I. Fortsetzung). Die Typen der Gravenhorst-schen Gattungen *Phytodietus* und *Ischnocerus* (Hym.). Konowia Vienna **3** 1924 pp. 41–51.

1724. — Pham-Tu-Thien. Sur le régime alimentaire d'une espèce de fourmis Indochinoises (*Pheidologeton diversus* Jerdon). Ann. Sci. nat. Zool. Paris (10) **7** 1924 pp. 131–135. [Hym.]

1725—Philiptschenko, J. Studien über Variabilität. 4. Ueber die Variabilität der Embryonen. Zs. indukt. Abstammgslehre Berlin **34** 1924 pp. 121–133 5 figs. [Collembola.]

1726.—Philpott, A. The tibial strigil of the Lepidoptera. Trans. N.Z. Inst. Wellington **55** 1924 pp. 215–224 1 pl. 34 figs.

1727.—Philpott, A. Notes and descriptions of New Zealand Lepidoptera. Trans. N.Z. Inst. Wellington **55** 1924 pp. 207–214, 663–669 5 figs.

1728.—Philpott, A. The genitalia in *Sabatinca* and allied genera (Lepidoptera Homoneura), with some observations on the same structures in the Mecoptera. Trans. Ent. Soc. London **1923** 1924 pp. 347–366 21 figs. [Zeugl.]

1729.—Phillips, W. W. A. Ectoparasites of Ceylon Bats. Spolia Zeylanica Colombo **13** 1924 pp. 65–70.

1730.—Pic, M. Méloïdes. Voy. Babault Afrique or. angl. Paris **1917** pp. 1–14 1 pl. 1 fig. [Col.]

1731.—Pic, M. Rhipidocerides et Anthicides. Voy. Babault Afrique or. angl. Paris **1921** pp. 1–32 2 photos. [Col.]

1732.—Pic, M. Contribution à l'étude des Helodidae (Col.). Echange Moulins **39** 1924 hors-texte pp. 5–8.

1733.—Pic, M. Notes diverses, descriptions et diagnoses. Echange Moulins **39** 1924 pp. 17–18. [Col.]

1734.—Pic, M. Coléoptères exotiques en partie nouveaux. Echange Moulins **39** 1924 pp. 19–20.

1735.—Pic, M. Nouveautés diverses. Mélanges exot. entom. Moulins **41** 1924 pp. 1–32 ; **42** 1924 pp. 1–32. [Col.]

1736.—Pic, M. Notes sur les Salpingides (Col. Heteromera). Bull. Soc. ent. France Paris **1924** pp. 67–68.

1737.—Pic, M. Nouveaux Longicornes de Chine (Col.). Bull. Soc. ent. France Paris **1924** p. 79.

1738.—Pic, M. Hispides nouveaux (Col.). Bull. Soc. ent. France Paris **1924** pp. 99–100.

1739.—Pic, M. Coléoptères nouveaux des Philippines. Bull. Soc. ent. France Paris **1924** pp. 230–231.

1740.—Pic, M. Cryptocéphalides de Madagascar (1re Partie). Bull. Mus. Hist. nat. Paris **1924** pp. 279–284. [Col.]

1741.—Pic, M. Coléoptères malacodermes du Congo belge. Rev. zool. afr. Brussels **12** 1924 pp. 437–443.

1742.—Pic, M. Vésicants en partie originaires du Congo. Rev. zool. afr. Brussels **12** 1924 pp. 444–454. [Col.]

1743.—Pic, M. Nouveaux Bruchidae du Congo Belge. Rev. zool. afr. Brussels **12** 1924 pp. 455–460. [Col.]

1744.—Pic, M. Nouveaux Coléoptères exotiques. Tijdschr. Ent. The Hague **67** 1924 pp. 29–31.

1745.—Pic, M. Un nouveau *Dasytes* F. de Sardaigne. Boll. Soc. ent. ital. Genoa **56** 1924 p. 80. [Col.]

1746.—Pic, M. Sur quelques Coléoptères intéressants d'Egypte. Bull. Soc. R. ent. Egypte Cairo **1923** 1924 pp. 52–56.

1747.—Pic, M. Habitats et notes concernant divers Coléoptères intéressants d'Egypte. Bull. Soc. R. ent. Egypte Cairo **1923** 1924 pp. 125–130.

1748.—Pic, M. Lampyrides et Telephorides des Iles Philippines. Phil. J. Sci. Manila **25** 1924 pp. 711–731. [Col.]

1749.—Picard, F. Description d'un nouveau Proctotrypide du genre *Hadronotus* (Hym.). Bull. Soc. ent. France Paris **1924** pp. 107–109 1 fig.

1750.—Pictet, A. Action des vapeurs d'alcool éthylique sur le développement et la pigmentation des Lépidoptères. C.R. Soc. Phys. Hist. nat. Genève **41** 1924 pp. 33–37.

1751.—Pictet, A. Recherches sur l'hérédité chez les Lépidoptères. Mit. schweiz. ent. Ges. Bern **13** 1924 pp. 358–359.

1752.—Pierre, C. Tipulidae nouveaux d' Algérie. Encyc. ent. Ser. B **2** Dipt. **1** Paris, Lechevalier 1924 pp. 9–12 10 figs.

1753.—Pierre, C. Tipulidae nouveaux. Encyc. ent. Ser. B **2** Dipt. **1** Paris, Lechevalier 1924 pp. 78–93 60 figs.

Pilz, G. F. *see* Crozier & Pilz.

1754.—Pinheiro Machado, G. *Attelabus melanocoryphus* Germar. Observações sobre a vida deste curculionideo. Bol. Soc. ent. Brasil Rio de Janeiro **1923** no. 4–6 1924 pp. 21–25 1 fig. [Col.]

1755.—Pionneau, P. Supplément et observations sur les Rhopalocères des environs de Bordeaux. Proc.-verb. Soc. linn. Bordeaux **75** 1923 pp. 144–146. [Lep.]

1756.—Pionneau, P. Premières notes sur les Chrysides du département de la Gironde (Hyménoptères). Proc.-verb. Soc. linn. Bordeaux **75** 1923 pp. 201–205.

1757.—Pionneau, P. Nouveautés lépidoptérologiques pour la faune girondine avec la description de deux formes nouvelles. Misc. ent. Castenet-Tolosan **27** 1924 pp. 57–58.

1758.—Planet, L. M Histoire naturelle des Longicornes de France. Encyc. ent. Ser. A **2** Paris, Lechevalier 1924 386 pp. 3 pls. 301 figs. [Col.]

1759.—Plath, O. E. Miscellaneous biological observations on bumble bees. Biol. Bull. Wood's Hole, Mass. **47** 1924 pp. 65–78. [Hym.]

1760.—Plath, O. E. Do anesthetized bees lose their memory ? Amer. Nat. New York **58** 1924 pp. 162–166. [Hym.]

1761.—Plavilstshikov, N. N. Novae Cerambycidarum formae e fauna Eurasiae. Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 225–229. [Col.]

1762.—Plavilstshikov, N. N. Analecta Coleopterologica. Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 230–233.

1763.—Pleske, T. Etudes sur les Stratiomyinae (Diptera) de la région paléarctique. Not. ent. Helsingfors **4** 1924 pp. 14–25 & 65–73.

1764.—Pleske, T. Etudes sur les Stratiomyidae de la région palaearctique. Encyc. ent. Ser. B **2** Dipt. **1** Paris, Lechevalier 1924 pp. 95–103. [Dipt.]

1765.—Plotnikov, V. I. Some observations on the variability of *Locusta migratoria* L., in breeding experiments. Bull. Ent. Res. London **14** 1924 pp. 241–243. [Orthop.]

1766.—Pongrácz, A. Beiträge zur Tiergeographie Polens. Arch. Natg. Berlin Abt. A **89** (1923) 1924 Heft 11 pp. 244–259 5 figs. 1 map.

1767.—[Popova, A. N.] Попова, А. Н. К изучению биологии *Gomphus flavipes* (Charp.). [The biology of *Gomphus flavipes* (Charp.)] Arb. biol. Wolga-Sta. Saratov **6** 1923 pp. 269–280 1 fig. [Odon.] [In Russian.]

1768.—Porter, C. E. Nueva contribución a nuestro estudio sobre pelos traqueales de los Longicornios. Rev. chil. Hist. nat. Santiago **27** (1923) 1924 pp. 97–98. [Col.]

1769.—Portevin, G. Travaux scientifiques de l'Armée d' Orient (1916–1919). Coléoptères Silphidae. Bull. Mus. Hist. nat. Paris **1924** pp. 81–82.

1770.—Potonie, H. W. Experimentell-kritische Untersuchung über die biologische Bedeutung des Umkehrpunktes in der Atmungsintensität kaltblütiger Tiere bei steigender Temperatur. Biol. Zentralbl. Leipzig **44** 1924 pp. 16–57.

1771.—Potts, W. H. A new variety of *Glossina schwetzi* Newstead & Evans from the Belgian Congo. Ann. Trop. Med. & Parasit. Liverpool **18** 1924 pp. 205–206 1 fig. [Dipt.]

Potts, W. H. *see* Newstead, Evans & Potts.

1772.—Poulton, E. B. Mimicry in the butterflies of Fiji considered in relation to the Euploeine and Danaine invasions of Polynesia and to the female forms of *Hypolimnas bolina* L. in the Pacific. Trans. Ent. Soc. London **1923** 1924 pp. 564–691 25 pls. 9 figs. [Lep.]

1773.—Poulton, E. B. The relation between the larvae of the Asilid genus *Hyperechia* (Laphriinae) and those of Xylocopid bees. Trans. Ent. Soc. London **1924** pp. 121–133 1 fig. 1 pl. [Dipt., Hym.]

1774.—Poulton, E. B. A new race of *Amauris lobengula* E. M. Sh. from S.E. of Lake Rudolph, flying with a corresponding ♀ of *Papilio dardanus* Brown. Trans. Ent. Soc. London **1924** pp. xxv–xxix. [Lep.]

1775.—Poulton, E. B. The terrifying appearance of *Laternaria* (Fulgoridae) founded on the most prominent features of the alligator. Trans. Ent. Soc. London **1924** pp. xliii–xlix 1 pl. [Hom.]

1776.—Poulton, E. B. *Papilio dardanus.* The most interesting butterfly in the world. J. E. Afr. Ugan. Nat. Hist. Soc. Nairobi no. **20** 1924 pp. 4–22 3 pls. [Lep.]

Pouyanne, *see* Correvon & Pouyanne.

1777.—Powell, H. Observations relatives à un vol migrateur de Lépidoptères. Etudes Lép. Rennes **22** 1924 pt. 1 pp. 1–9.

1778.—Prack, G. Die Stammesgeschichte der Lepidopteren. Intern. ent. Zs. Guben **18** 1924 pp. 87–90.

1779.—Preece, W. H. A. Notes on the Catocalinae of Sault Ste. Marie, Ontario. Canad. Field Nat. Ottawa **38** 1924 pp. 170–171. [Lep.]

1780.—Prell, H. Über das Ausschlüpfen von Insekten aus inadäquaten Kokons. Zool. Anz. Leipzig **59** 1924 pp. 241–256 5 figs.

1781.—Prell, H. Die biologischen Gruppen der deutschen Rhynchitiden. Zool. Anz. Leipzig **61** 1924 pp. 153–170 9 figs. [Col.]

1782.—Prell, H. Die Kopfzierate der Prozessions spinner in ihre biologischen Bedeutung. Zs. angew. Ent. Berlin **10** 1924 pp. 460–463. [Lep.]

1783.—Priesner, H. Beitrag zur Kenntnis der Thysanopteren Oberösterreichs. Jahr. Ber. oberöst. Musealver. Linz **78** 1920 pp. 50–63.

1784.—Priesner, H. Beiträge zur Verbreitung der Anophelen in Oberösterreich. Jahr. Ber. oberöst. Musealver. Linz **79** 1922 pp. 42–51. [Dipt.]

1785.—Priesner, H. Neue europäische Thysanopteren (II & III). Konowia Vienna **2** 1923 pp. 82–85 ; **3** 1924 pp. 1–5.

1786.—Priesner, H. Neue Phloeothripiden (Thys.) aus Ungarn. Ent. Zs. Frankfort o. M. **37** 1924 pp. 49, 52–53 ; **38** pp. 2–3.

1787.—Priesner, H. Die Winterquartiere der Thysanopteren. Ent. Jahrb. Leipzig **33-34** 1924 pp. 151–162.

1788.—Priesner, H. Thysanopteren von der Nordseeinsel Spiekeroog. Ent. Jahrb. Leipzig **33-34** 1924 pp. 163–166 4 figs.

1789.—Priesner, H. Bernstein-Thysanoptera. Ent. Mitt. Berlin **13** 1924 pp. 130–151 1 pl.

1790.—Priesner, H. Zur Kenntnis der Estlandischen Moorfauna (II Beitrag). Thysanoptera. S.B. Naturf. Ges. Dorpat **31** Heft 1–2 1924 pp. 37–42 1 fig.

1791.—Pröbstle, L. Verzeichnis der in der Umgegend von Rieden in den Jahren 1893 mit 1902 und in der Umgegend von Fellheim in den Jahren 1903 mit 1918 gesammelten Käfer. Ber. naturw. Ver. Schwab. und Neuburg Augsburg **42** 1919 pp. 187–230. [Col.]

1792.—Pröbstle, L. Verzeichnis der in der Umgegend von Rieden in den Jahren 1899 mit 1902 und in der Umgegend von Fellheim in den Jahren 1903 mit 1918 gesammelten Schmetterlinge. Ber. naturw. Ver. Schwab. und Neuburg Augsburg **42** 1919 pp. 231–250. [Lep.]

1793.—Prout, A. E. Some new forms of Indo-Australian Noctuidae. Bull. Hill Mus. Witley **1** 1924 pp. 413-426 1 pl. [Lep.]

1794.—Prout, A. E. Some apparently new Noctuidae from Sumatra, New Guinea, Mefor and Buru. Bull. Hill Mus. Witley **1** 1924 pp. 427–450 3 pls. [Lep.]

1795.—Prout, A. E. Three new Catocalinae, with a description of the female of *Calliodes appollina,* Gn. Bull. Hill Mus. Witley **1** 1924 pp. 452–455 1 pl. [Lep.]

1796.—Prout, A. E. & **Talbot,** G. A preliminary revision of the genus *Trisuloides* Btlr. (Lep. Het., Noctuidae). With descriptions of new genera and new species, and notes on the genitalia. Bull. Hill Mus. Witley **1** 1924 pp. 400–412 3 pls.

1797.—Prout, L. B. New Geometridae from Dutch New Guinea and Mefor Island. Bull. Hill Mus. Witley **1** 1924 pp. 456–476 2 pls. [Lep.]

1798.—Prout, L. B. New Palaearctic Geometridae. Bull. Hill Mus. Witley **1** 1924 pp. 478–483. [Lep.]

Prüffer, J. *see* Niesiolowski & Prüffer.

1799.—Pruthi, H. S. The development of the male genitalia of Homoptera with preliminary remarks on the nature of these organs in other insects. Q. J. Microsc. Sci. London **69** 1924 pp. 59–96, 1 pl.

1800.—Pruthi, H. S. On the post-embryonic development and homologies of the male genital organs of *Tenebrio molitor* L. (Coleoptera). Proc. Zool. Soc. London **1924** pp. 857–868 3 pls. 3 figs.

1801.—Pruthi, H. S. On the development of the ovipositor and the efferent genital ducts of *Tenebrio molitor* L. (Coleoptera), with remarks on the comparison of the latter organs in the two sexes. Proc. Zool. Soc. London **1924** pp. 869–883 1 pl. 6 figs.

1802.—Pruthi, H. S. Studies on Insect metamorphosis—1. Prothetely in meal-worms (*Tenebrio molitor*) and other Insects. Effects of different temperatures. Proc. Cambridge Phil. Soc. Biol. Sci. **1** 1924 pp. 139–147 1 pl.

1803.—Przibram, H. Über die Funktion der Käferfühler, insbesondere des Wasserkäfers *Hydrophilus piceus* Geoff. Zool. Anz. Leipzig **60** 1924 pp. 251–261. [Col.]

1804.—Przibram, H. Die Rolle der Dopa in den Kokonen gewisser Nachtfalter und Blattwespen mit Bemerkungen über die chemischen Orte der Melaninbildung (zugleich: Ursachen tierischer Farbkleidung. X). Arch. mikr. Anat. Entwickl. Berlin **102** 1924 pp. 624–633.

1805.—Puel, L. Description d'une nouvelle race de *Pterostichus* (Coleopt., Carabidae). Misc. ent. Castanet-Tolosan **28** 1924 p. 23.

1806.—Pulikovsky, N. Metamorphosis of *Deuterophlebia* sp. (Diptera, Deuterophlebiidae Edw.). Trans. Ent. Soc. London **1924** pp. 45–63 3 pls.

1807.—Pungur, T. Fauna Regni Hungariae, Orthoptera. Budapest **1918** pp. 1–16.

1808.—Puri, I. M. Studies on the anatomy of *Cimex lectularius* L. I, II. Parasitology, Cambridge **16** 1924 pp. 84–97 & 269–278 1 pl. 18 figs. [Hem.]

Querci, O. *see* Verity & Querci.

1809.—Rabaud, E. L'Instinct. Ann. Soc. roy. Zool. Belg. Brussels **53** 1923 pp. 94–126. [Hym.]

1810.—Ragusa, E. Gli Ipidae della Sicilia. Boll. Soc. ent. ital. Genoa **56** 1924 pp. 114–118. [Col.]

1811.—Ramakrishna Ayyar, T. V. List of Psyllidae recorded from India and Ceylon. Rec. Ind. Mus. Calcutta **26** 1924 pp. 621–625. [Hom.]

1812.—Rambousek, F. G. Fauna Coleopterorum bulgarica. Trav. Soc. bulgar. Sci. nat. Sofia **5** 1912 pp. 57–113. [In Bulgarian; summary in German.]

1813.—Rambousek, F. G. Les *Xantholinus* aux yeux atrophiés (Col.). Casopis Prague **21** 1924 pp. 39–40.

1814.—Ramme, W. Zur Lebenweise von *Pseudagenia* (Hym.) SB. Ges. natf. Freunde Berlin **1920** pp. 130–132 1 pl.

1815.—Rangnow, H. Beitrag zur Symbiose zwischen Lycaeniden und Ameisen. Intern. ent. Zs. Guben **18** 1924 pp. 10–11. [Lep.]

1816.—Rasetti, G. E. & F. Un nuovo *Bythinus* delle Alpi Apuane (*B. apuanus*, nobis). Boll. Soc. ent. ital. Genoa **56** 1924 pp. 1–4 2 figs. [Col.]

1817.—Rasetti, G. E. Sulla patria del *Carabus lefebvrei* Dej. var *lombardii* Luig. Boll. Soc. ent. ital. Genoa **56** 1924 pp. 41–43. [Col.]

1818.—Rau, P. Notes on captive colonies and homing of *Bombus pennsylvanicus* De Geer. Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 368–380 1 pl. [Hym.]

1819.—Rau, P. The biology of the roach, *Blatta orientalis*, Linn. Trans. Acad. Sci. St. Louis **25** 1925 pp. 57–79. [Orth.]

1820.—Rau, P. A note on the courtship of *Telea polyphemus*. Canad. Ent. Orillia **56** 1924 p. 271. [Lep.]

1821.—Rebel, H. Rept. Sci. Res. Norweg. Exped. Novaya Zemlya 1921. No. 7. Lepidoptera. Christiania **1923** pp. 1–15 1 pl.

1822.—Rebel, H. Aberrative Falter. Verh. zool. bot. Ges. Wien **73** (1923) 1924 pp. (5)–(6). [Lep.]

1823.—Rebel, H. Einige Lepidopteren als Tabaksschädlinge auf Sumatra. Verh. zool. bot. Ges. Wien **73** (1923) 1924 pp. (73)–(75).

1824.—Rebel, H. Der Formenkreis von *Philosamia cynthia* Dru. Verh. zool.-bot. Ges. Wien **73** (1923) 1924 pp. (108)–(112). [Lep.]

1825.—Redfield, H. A case of maternal inheritance in *Drosophila.* Amer. Nat. New York **58** 1924 pp. 566–569. [Dipt.]

Rehn, J. A. G. *see* Cresson & Rehn.

1826.—Reichardt, A. Tableau pour la détermination des *Pissodes* de la Russie. Défense des Plantes Leningrad **1** 1924 pp. 127–129 17 figs. [Col.] [In Russian.]

1827.—Reichardt, A. Zwei neue Histeriden aus Turkestan. Ent. Bl. Berlin **20** 1924 pp. 162–166 5 figs. [Col.]

1828.—Reichensperger, A. Neue sudamerikanische Histeriden als Gäste von Wanderameisen und Termiten. II Teil. Rev. suisse Zool. Geneva **31** 1924 pp. 117–153 1 pl. 1 fig. [Col.]

1829.—Reichensperger, A. Die Gäste der Dorylinen und Ecitinen, eine Uebersicht und ein Vergleich. Mit. schweiz. ent. Ges. Bern **13** 1924 pp. 357–358. [Hym.]

1830.—Reichensperger, A. Das Weibchen von *Eciton quadriglume* Hal. einige neue ecitophile Histeriden und allgemeine Bemerkungen. Zool. Anz. Leipzig **60** 1924 pp. 201–213 5 figs. [Hym., Col.]

1831.—Reichensperger, A. Zur Kenntnis myrmekophiler Histeriden. Ent. Mitt. Berlin **13** 1924 pp. 302–308 2 figs. [Col.]

1832.—Reinhard, H. J. A new southern Tachinid Fly (Diptera). Ent. News Philadelphia **35** 1924 pp. 54–56.

1833.—Reinhard, H. J. New Muscoid Diptera. Ent. News Philadelphia **35** 1924 pp. 269–274.

1834.—Reinhard, H. J. A new species of *Gonia* from Texas (Diptera). Ent. News Philadelphia **35** 1924 pp. 357–358.

1835.—Reitter, E. Die *Larinus*-Arten der Untergattungen *Larinus* s. str., *Larinorhynchus, Larinomesius* und *Eustenopus* aus Europa und den angrenzenden Gebieten (Col. Curcul.). Wiener ent. Ztg. Vienna **41** 1924 pp. 61–77.

1836.—Rethfeldt, C. Die Viviparität bei *Chrysomela varians* Schaller. Zool. Jahrb. Jena Abt. Anat. **46** 1924 pp. 245–302 30 figs. [Col.]

1837.—Reuss, T. Nochmals "Bläulingsraupen und Ameisen" ein Beitrag über die "Grenzen des Erträglichen." Intern. ent. Zs. Guben **17** 1924 pp. 177–179. [Lep.]

1838.—Rhynehart, J. G. The larva and pupa of *Trichocera regelationis* L. (Diptera, Rhyphidae). Proc. Belfast N. H. Soc. **1922-1923** 1924 pp. 36–47 3 pls.

1839.—Ribaut, H. Notes sur les Hémiptères-Hétéroptères. Bull. Soc. Hist. nat. Toulouse **50** 1922 pp. 227–230 2 figs.

1840.—Richards, O. W. The mating habits of certain species of *Micropteryx.* Ent. Mo. Mag. London **60** 1924 pp. 31–34. [Zeugl.]

1841.—Riley, N. D. A note on the genus *Pyrrhopygopsis* Godm. & Salv. (Lep., Hesperiidae). Entomologist London **57** 1924 pp. 245–249.

1842.—Riley, N. D. & Gabriel, A. G. Catalogue of the type specimens of Lepidoptera Rhopalocera in the British Museum. Part I. Satyridae. London Br. Mus. (N.H.) 1924 62 pp.

1843.—Rimsky-Korsakov, M. N. Ueber Wasserhymenopteren aus der Gattung *Caraphractus* Haliday. Турды Ленингр. Общ. Естеств. [Trans. Leningrad Soc. Nat. **54** (2) 1925 pp. 97–113 14 figs. [Hym.] [Russian with German summary.]

1844.—Rimsky-Korsakov, M. Ueber eine neue *Embia*-Art aus Kamerun. Ent. Mitt. Berlin **13** 1924 pp. 5–7 1 fig. [Embioptera.]

1845.—Rimsky-Korsakov, M. & **Grossmann,** W. Die Tätigkeit der russischen entomologischen Anstalten von 1914 bis 1924. Ent. Anz. Vienna **4** 1924 pp. 85–88, 95–98, 101–104.

1846.—Ringdahl, O. Översigkt av de hittils i vårt land funna arterna tillhörande släktena *Mydaea* R. D. och *Helina* R. D. (Muscidae). Ent. Tidsk. Stockholm **45** 1924 pp. 39–66. [Dipt.]

1847.—Ris, F. Ueber die Sphragis des *Parnassius mnemosyne.* Schweizer ent. Anz. Zürich **3** 1924 pp. 1–3, 9–11. [Lep.]

1848.—Ris, F. Auf den Spuren des *Parnassius mnemosyne.* Schweizer ent. Anz. Zürich **3** 1924 pp. 33–35. [Lep.]

1849.—Robertson, C. Conditions of natural selection. Science Garrison N.Y. **59** 1924 p. 363. [Hym.]

1850.—Robertson, C. Color preference of Bees (Hymen.). Ent. News Philadelphia **35** 1924 p. 65.

1851.—Robertson, C. Flower visits of Insects. II. Psyche Boston **31** 1924 pp. 93–111.

1852.—Robertson, C. Systematic position of Dasygastrae (Hym.). Bull. Brooklyn Ent. Soc. **19** 1924 p. 181.

1853.—Robinson, W. Some new species of *Erythroneura* (Homoptera, Cicadellidae). Canad. Ent. Orillia **56** 1924 pp. 58–62.

1854.—Robinson, W. Additional new species of *Erythroneura* (Homoptera, Cicadellidae). Canad. Ent. Orillia **56** 1924 pp. 154–157, 290–292.

1855.—Roepke, W. Zur Kenntnis einiger Malaiischer Bombyciden-Arten. Tijdschr. Ent. The Hague **67** 1924 pp. 160–179 2 figs. 2 pls. [Lep.]

1856.—Rohdendorf, B. v. Eine neue Tachiniden-Gattung aus Turkestan. Zool. Anz. Leipzig **58** 1924 pp. 228–231; **60** 1924 pp. 88. [Dipt.]

1857.—Rohdendorf, B. v. Eine neue russische Phasiinen-Gattung (Dipt.). Ent. Mitt. Berlin **13** 1924 pp. 125–126 2 figs.

1858.—Rohdendorf, B. Calliphorinen-Studien. i. (Dipt., Tachinidae). Ent. Mitt. Berlin **13** 1924 pp. 281–285 3 figs.

1859.—Röher, A. Ueber Färbung und Sinne der Schmetterlinge. Intern. ent. Zs. Guben **18** 1924 pp. 98–100. [Lep.]

1860.—Röher, A. Farbung und Sinne der Schmetterlinge. Intern. ent. Zs. Guben **18** 1924 p. 117. [Lep.]

1861.—Rohwer, S. A. Notes on and descriptions of some sawflies from Japan (Hym.). J. Washington Acad. Sci. **1924** pp. 213–215.

1862.—Rohwer, S. A. Hymenoptera collected by the Williams Galapagos Expedition. Zoologica New York **5** 1924 pp. 173–175.

1863.—Rohwer, S. A. Descriptions of three species of *Tiphia* parasitic on *Popillia japonica* (Hym.). Proc. Ent. Soc. Washington **26** 1924 pp. 87–92.

1864.—Rohwer, S. A. A new sawfly of the family Xyelidae (Hymenoptera). Proc. Ent. Soc. Washington **26** 1924 p. 215.

1865.—Rohwer, S. A. Hymenoptera of the Siju Cave, Garo Hills, Assam. II. Description of a new Braconid. Rec. Ind. Mus. Calcutta **26** 1924 pp. 124–125.

1866.—Roman, A. Zoological Results of the Swedish Expedition to Central Africa, 1921. Insecta. 5. Hymenoptera: Entomophaga. Ark. Zool. Stockholm **16** 1924 no. 17 pp. 1–9.

1867.—Roman, A. Wissenschaftliche Ergebnisse der schwedischen entomologischen Reise des Herrn Dr. A. Roman in Amazonas 1914–1915. 10. Hymenoptera: Braconidae, Cyclostomi (pro p.). Ark. Zool. Stockholm **16** 1924 no. 20 pp. 1–40 8 figs.

Roman, A. *see* Friese, Kiaer, Kieffer and Roman.

1868.—Romaniszyn, J. Deux intéressantes aberrations des Lépidoptères. Polsk. Pismo ent. Lemberg **3** 1924 pp. 87–89 1 fig.

1869.—Root, F. M. Further notes on the male genitalia of American *Anopheles.* Amer. J. Hyg. Baltimore **4** 1924 pp. 456–465 3 pls. [Dipt.]

1870.—Root, F. M. The larval pilotaxy of *Anopheles quadrimaculatus* and *A. punctipennis.* Amer. J. Hyg. Baltimore **4** 1924 pp. 710–724 4 figs. [Dipt.]

1871.—**Root,** F. M. Notes on dragonflies (Odonata) from Lee County, Georgia, with a description of *Enallagma dubium* n. sp. Ent. News Philadelphia **35** 1924 pp. 317–324 4 figs.

1872.—**Rosenberg,** E. C. Contributions to the knowledge of the life-habits, development and systematics of the Coleoptera. iv. On the larva of *Batrisodes venustus* Reichenb., with remarks on the life-habits of other so-called myrmecophile Coleoptera. Ent. Medd. Copenhagen **14** 1924 pp. 374–376 1 plate.

1873.—**Rosset,** O. C. Metamórfosis anormal de cuatro *Arctia caja* L. Butll. Inst. catal. Hist. nat. Barcelona **4** 1924 pp. 164–170 3 figs. [Lep.]

1874.—**Rostand,** J. Sur l'intersexualité chez les Phasmes. C.R. Soc. Biol. Paris **91** 1924 pp. 448–449. [Orth.]

1875.—**Rostrup,** S. Kornets Blomsterflue (*Hylemyia coarctata*) i Danmark 1903–1923. Tidsskr. Planteavl. Copenhagen **30** 1924 pp. 713–759 3 figs. [Dipt.]

1876.—**Roth,** P. Contribution à la connaissance des Hyménoptères Aculeata de l'Afrique du Nord, 2e note. Récoltes de M. Le Boul dans l'Ouest Algérien. Bull. Soc. Hist. nat. Afr. N. Algiers **15** 1924 pp. 122–124.

1877.—**Rothschild,** Lord. Some new or noteworthy Madagascar and African Heterocera. Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 306–317. [Lep.]

1878.—**Rothschild,** N. C. Rept. Sci. Res. Norweg. Exped. Novaya Zemlya. 1921. No. 4. Siphonaptera. Christiania **1922** pp. 1–9 5 figs.

1879.—**Roubal,** J. *Cryptophagus* (subg. *Mnionomus*) *bohemicus* sp. n. Casopis Prague **21** 1924 pp. 23–24. [Col.]

1880.—**Roubal,** J. Zwei neue *Scraptia*-Arten aus der paläarktischen Region (Col. Mordellidae). Wiener ent. Ztg. Vienna **41** 1924 pp. 181–182.

1881.—**Roubal,** J. Einige Käferneuheiten. Ent. Anz. Vienna **4** 1924 pp. 80–81. [Col.]

1882.—**Roubal,** J. Zur Käferfauna der Ost-Karpathen (Czorná Hora). II. Staphylinidae. Ent. Bl. Berlin **20** 1924 pp. 244–247. [Col.]

1883.—**Roubal,** J. Coleopterologische Notizen. vii. Soc. ent. Stuttgart **39** 1924 p. 17. [Col.]

1884.—**Roubaud,** E. Histoire des Anacamptomyies, mouches parasites des guêpes sociales d'Afrique. Ann. Sci. nat. (Zool.) Paris **7** 1924 pp. 197–248 2 pls. 15 figs.

1885.—**Royer,** M. Travaux scientifiques de l'Armée d'Orient (1916–1918). Hémiptères Hétéroptères (troisième note). Bull. Mus. Hist. nat. Paris **1924** pp. 193–200 11 figs.

1886.—**Royer,** M. Notes synonymiques (Hemipt.) Bull. Soc. ent. France Paris **1923** 1924 pp. 250–252.

1887.—**Royer,** M. Notes synonymiques (Hem.), (deuxième partie). Bull. Soc. ent. France Paris **1924** pp. 117–119.

1888.—**Rudolfs,** W. Note on the mating of *Anopheles maculipennis* (Dipt. : Culicidae). Ent. News Philadelphia **35** 1924 pp. 69–70.

1889.—**Rudy,** H. Die postglazialen Klimaverhältnisse und ihre Wirkung auf die Verbreitung der xerothermen Insekten im oberen Rheingebiet. Mitt. badischen ent. Ver. Freiburg i. Br. **1** 1924 pp. 73–82 2 figs.

1890.—**Rühl,** M. Liste neuerdings beschriebener und gezogener Parasiten und ihre Wirte. ix. Soc. ent. Stuttgart **39** 1924 pp. 31–32, 35–36, 39–40, 43–44.

1891.—**Rumphorst,** H. Über das Vorkommen der Ephemeride *Torleya belgica* Lest. in Deutschland. Zool. Anz. Leipzig **59** 1924 pp. 331–336 2 figs.

1892.—**Ruschka,** F. Die europäisch-mediterranen Eucharidinae und Perilampinae. (Hym. Chalc.) [Der Chalcididentsudien iv und v Teil.] D. ent. Zs. Berlin **1924** pp. 82–96 12 figs.

1893.—**Ruschka,** F. Kleine Beiträge zur Kenntnis der forstlichen Chalcididen und Proctotrupiden von Schweden. Ent. Tidsk. Stockholm **45** 1924 pp. 8–16 14 figs. [Hym.

1894.—Rüschkamp, F. Instinktmodifikation in einer Ameisen-Adoptionskolonie. Zs. wiss. Insektenbiol. Berlin **19** 1924 pp. 176–178. [Hym.]

1895.—Sack, P. Rept. Sci. Res. Norweg. Exped. Novaya Zemlya 1921 no. 15. Diptera. Christiania **1923** pp. 1–10 3 figs.

Sainte-Claire Deville, J. *see* Deville, J. Ste.-C.

1896.—St. George, R. A. Studies on the larvae of North American beetles of the subfamily Tenebrioninae, with a description of the larva and pupa of *Merinus laevis* (Olivier). Proc. U. S. Nat. Mus. Washington **65** 1924 art. 1 no. 2514 pp. 1–22 4 pls. [Col.]

1897.—Sälzl, M. Aberrationen. Mitt. münchn. ent. Ges. **14** 1924 pp. 142–143. [Lep.]

Sälzl, M. *see* Metschl & Sälzl.

1898.—Sandhouse, G. A. New North American species of bees belonging to the genus *Halictus* (*Chloralictus*). Proc. U. S. Nat. Mus. Washington **65** 1924 art. 19 no. 2532 43 pp. [Hym.]

1899.—Sandhouse, G. A. Bees of the genus *Osmia* in the collection of the California Academy of Sciences. Proc. Cal. Acad. Sci. San Francisco (4) **13** 1924 pp. 341–372. [Hym.]

1900.—Sandhouse, G. & Cockerell, T. D. A. Expedition of the California Academy of Sciences to the Gulf of California in 1921. The Bees (iii). Proc. Cal. Acad. Sci. San Francisco (4) **13** 1924 pp. 333–339. [Hym.]

Sandhouse, G. *see* Cockerell & Sandhouse.

1901.—Santschi, F. Revue du genre *Plectroctena* F. Smith. Rev. suisse Zool. Geneva **31** 1924 pp. 155–173 3 figs. [Hym.]

1902.—Santschi, F. Nouvelles fourmis brésiliennes. Ann. Soc. ent. Belg. Brussels **64** 1924 pp. 5–20. [Hym.]

1903.—Santschi, F. Descriptions de nouveaux Formicides africains et notes diverses. II. Rev. zool. afr. Brussels **12** 1924 pp. 195–224. [Hym.]

1904.—Sarra, R. Notizie biologiche di un coleottero (*Lixus anguinus* L.) dannoso di cavoli. Boll. Lab. Zool. Portici **17** 1924 pp. 137–146. [Col.]

1905.—Saunders, L. G. An unusual case of sexual dimorphism in Ceratopogonine midges. Ent. Mo. Mag. London **60** 1924 pp. 133–134 2 figs. [Dipt.]

1906.—Saunders, L. G. On the early stages of *Cardiocladius* (Dipt. Chironomidae). Ent. Mo. Mag., London **60** 1924 pp. 227–231 9 figs.

1907.—Savin, W. M. The huntress of spiders, *Ageniella bombycina.* Nat. Hist. New York **24** 1924 pp. 520–522 5 figs. [Hym.]

1908.—Schaeffer, C. On a few new and old Chrysomelidae. J. New York Ent. Soc. **32** 1924 pp. 138–145. [Col.]

1909.—Schaeffer, C. On *Casnonia picta* Chaudoir and *C. suturalis* Chaudoir. Bull. Brooklyn Ent. Soc. **19** 1924 pp. 147–148. [Col.]

1910.—Schatzmayr, A. Gli *Apion* (*Catapion*) italiani. Mem. Soc. ent. ital. Genoa **1** 1922 pp. 24–59. [Col.]

1911.—Schatzmayr, A. Gli Apionini italiani. Mem. Soc. ent. ital. Genoa **1** 1922 pp. 158–225. [Col.]

1912.—Schatzmayr, A. Gli *Apion* (*Erythrapion*) italiani. Redia Florence **15** 1924 pp. 105–113. [Col.]

1913.—Schaus, W. New species of moths in the United States National Museum. Proc. U. S. Nat. Mus. Washington **65** 1924 art. 7 no. 2520 74 pp. [Lep.]

1914.—Schaus, W. New species of Pyralidae of the subfamily Nymphulinae from tropical America (Lepid.). Proc. Ent. Soc. Washington **26** 1924 pp. 93–130.

1915.—Schaus, W. A new moth injurious to cocoanut palm (Lepidoptera: Limacodidae). Proc. Ent. Soc. Washington **26** 1924 p. 180.

1916.—Schaus, W. A new moth of the subfamily Phycitinae. Proc. Ent. Soc. Washington **26** 1924 p. 196. [Lep.]

1917.—Schawerda, K. *Metopoceras bubaceki* n. sp. ♂. Verh. zool.-bot. Ges. **Wien 73** (1923) 1924 p. (25) 1 fig. [Lep.]

1918.—Schawerda, K. Neue Lepidopterenformen. Verh. zool.-bot. Ges. Wien **73** (1923) 1924 pp. (87)–(90) 5 figs. [Lep.]

1919.—Schawerda, K. Neue Arten und Formen aus Mesopotamien. Verh. zool.-bot. Ges. Wien **73** (1923) 1924 pp. (158)–(163) 11 figs. [Lep.]

1920.—Schawerda, K. Lepidopteren der Kaisergebirge in Nordtirol. Verh. zool.-bot. Ges. Wien **73** (1923) 1924 pp. (1)–(4). [Lep.]

1921.—Schawerda, K. Eine Lokalrasse von *Lycaena damon* L. aus den Tiroler Alpen. Mitt. münchn. ent. Ges. **14** 1924 pp. 24–25. [Lep.]

1922.—Schawerda, K. Neue palaearktische Lepidopterenformen. Mitt. münchn. ent. Ges. **14** 1924 pp. 25–27.

1923.—Schawerda, K. Faunula dolomitana. Mitt. münchn. ent. Ges. **14** 1924 pp. 73–119. [Lep.]

1924.—Schilder, F. A. Rhipiphoriden-Studien. vi. Revision des Genus *Metoecus* Dej. (1833). D. ent. Zs. Berlin **1924** pp. 237–244. [Col.]

1925.—Schille, F. Seltene und aberrative Lepidopteren meiner Sammlung. Polsk. Pismo ent. Lemberg **3** 1924 pp. 2–18.

1926.—Schille, F. Eine neue Form von *Baptria tibiale* Esp. N. Beitr. syst. Insektenk. Berlin **3** 1924 p. 47 2 figs. [Lep.]

1927.—Schleicher, H. Über drei Histeriden und einen Cerambyciden. Ent. Anz. Vienna **4** 1924 pp. 37–38. [Col.]

1928.—Schleicher, H. Einige neue Aberrationen meiner Sammlung. Ent. Bl. Berlin **20** 1924 pp. 57–59. [Col.]

1929.—Schmidt, E. Neue Zikaden aus dem tropischen Afrika. Soc. ent. Stuttgart **39** 1924 pp. 21–23. [Hom.]

1930.—Schmidt, E. *Kirongoziella kunstmanni*, eine neue Tropiduchinengattung und Art aus dem tropischen Afrika. Soc. ent. Stuttgart **39** 1924 pp. 37–38. [Hom.]

1931.—Schmidt, E. *Pseudaphrophora chilensis*, eine neue Cercopidengattung und Art von Chile. Soc. ent. Stuttgart **39** 1924 p. 43. [Hom.]

1932.—Schmidt, E. Zwei neue *Pomponia*-arten des Stettiner Museums. Soc. ent. Stuttgart **39** 1924 p. 48. [Hom.]

1933.—Schmidt, E. Neue Zikaden-Gattungen und Arten aus dem tropischen Afrika. Ent. Mitt. Berlin **13** 1924 pp. 97–109. [Hom.]

1934.—Schmidt, E. Neue Zikaden-Gattungen und Arten. Ent. Mitt. Berlin **13** 1924 pp. 285–297. [Hom.]

1935.—Schmidt, E. Bemerkungen über einige deutsche Rüsselkäfer aus der Gattung *Rhynchites*. Zs. wiss. Insektbiol. Berlin **19** 1924 pp. 187–190 1 fig. [Col.]

1936.—Schmiedeknecht, O. Opuscula Ichneumonologica. Blankenberg. i. Thür. Fasc. **38** 1924 pp. 2963–3042. [Cont.] [Hym.]

1937.—Schmiedeknecht, O. *Heterospilus coffeicola* n. sp. eine in Kaffeefrüchten in Uganda lebende Schlupfwespe. Meded. Koffiebessenboeboek-Fonds Soerabaya no. **9** 1924 pp. 202–204 1 fig. [Hym.]

1938.—Schmiedeknecht, O. A short summary of the section Tryponides Prosopi (Ichneumonidae). Ent. Mo. Mag.London **60** 1924 pp. 45–48 103–112. [Hym.]

1939.—Schmitz, H. Über das Vorkommen von Kreuzborstenreihen bei Phoriden. Schr. physik. Ges. Königsberg **63** 1922 pp. 130–131. [Dipt.]

1940.—Schmitz, H. Drei neue europäische *Phyllomyza*-Arten. Konowia Vienna **2** 1923 pp. 44–47. [Dipt.]

1941.—Schmitz, H. Mitteilungen über allerlei Phoriden. (Phoridae orb. terr., Diptera), No. 1–5. Natuurhist. Maandblad Maastricht **13** 1924 pp. 129–131.

1942.—Schmitz, H. Drei neue Platyphorinen (Phoridae, Diptera) und eine neue Wirtstermite. Zool. Anz. Leipzig **59** 1924 pp. 289–304 3 figs. [Dipt., Isop.]

1943.—Schmitz, H. Ein neuer eigenartiger Fall " boreal-alpiner " Verbreitung bei Phoriden (Dipt.). Wiener ent. Ztg. Vienna **41** 1924 pp. 55–57.

1944.—Schmitz, H. Ueber die von P. G. Strobl beschriebenen Phoridarten. Ent. Medd. Copenhagen **14** 1924 pp. 314–322. [Dipt.]

1945.—Schmitz, H. Phorideos ecitophilos de Minas Geraes (Dipt.). Mus. Nac. do Rio de Janeiro Publ. no. 4 1924 29 pp. 3 pls.

1946.—Schmitz, H. & **Mjöberg,** E. Results of Dr. E. Mjöberg's Swedish Scientific Expeditions to Australia, 1910–1913. 35. Sciaridae und Phoridae. Ark. Zool. Stockholm **16** no. 9 1924 pp. 1–8 3 figs. [In German.] [Dipt.]

1947.—Schneider, C. Beitrag zur Biologie der Geometriden. Intern. ent. Zs. Guben **17** 1924 pp. 159–160. [Lep.]

1948.—Schneider, H. *Hepialus humuli,* Baumflug. Intern. ent. Zs. Guben **18** 1924 pp. 61–62 86–87. [Lep.]

1949.—Schoenemund, E. Plecoptera. Biologie der Tiere Deutschlands Berlin Teil 32 1924 34 pp. 24 figs.

1950.—Schoenfeld, O. Einige interessante Aberrationen meiner Sammlung und anderes aus meiner Sammelpraxis. Intern. ent. Zs. Guben **18** 1924 pp. 39–41. [Lep.]

1951.—Scholz, E. J. R. Die Rassen des *Bombus soroeënsis* Fbr. und einige andere Färbungserscheinungen bei Hummeln. N. Beiträge system. Insektenk. Berlin **3** 1924 pp. 3–8. [Hym.]

1952.—Scholz, E. J. R. *Formica exsecta* Nyl. var. *sudetica* nov. var. N. Beitr. syst. Insektenk. Berlin **3** 1924 p. 48. [Hym.]

1953.—Scholz, M. F. R. Zur Lebensgeschichte von *Tenebrio* (*Neatus*) *picipes* Herbst. Ent. Bl. Berlin **20** 1924 pp. 178–182. [Col.]

1954.—Schopfer, E. Beitrag zur Microlepidopteren-Fauna der Dresdener Gegend. D. ent. Zs. Iris Dresden **37** 1923 pp. 82–84.

1955.—Schött, H. Rept. Sci. Res. Norweg. Exped. Novaya Zemlya 1921. No. 12. Collembola. Christiania 1923 pp. 1–14 4 figs.

1956.—Schrader, S. H. Reproduction in *Acroschismus wheeleri* Pierce. J. Morph. Philadelphia **39** 1924 pp. 157–205 4 pls. 1 fig. [Col.]

1957.—Schreiber, C. Die Biologie der Eupithecien, insbesondere v. *Eup. tripunctaria* H. S. Intern. ent. Zs. Guben **17** 1924 pp. 161–164. [Lep.]

1958.—Schreiber, K. Das Vorkommen von *Colias myrmidone* Esp. und deren Abarten im Faunengebiete von Regensburg. Intern. ent. Zs. Guben **17** 1924 pp. 182–184. [Lep.]

1959.—Schröder, C. Handbuch der Entomologie. Jena, Lief. 5–14 1922–24.

1960.—Schröder, O. Ueber die Begattung und Eiablage von *Oecanthus pellucens* Scop. Mitt. badischen ent. Ver. Freiburg i. Br. **1** 1924 pp. 46–50 1 fig. [Orth.]

1961.—Schröder, O. Melanismus bei *Melanargia galathea* L. Mitt. badischen ent. Ver. Freiburg i. Br. **1** 1924 pp. 69–70. [Lep.]

1962.—Schroeder, G. Beiträge zur Kenntnis der Dipteren-Fauna Pommerns. vii. Stettin. ent. Ztg. **84** (1923) 1924 pp. 187–189.

1963.—Schubart, O. Die Carabenfauna Schleswig-Holsteins. 1. Carabenaufsatz. Ent. Jahrb. Leipzig **31** 1922 pp. 105–116. [Col.]

1964.—Schubart, O. Dipteren von der Mellum. Zs. wiss. Insektenbiol. Berlin **19** 1924 pp. 42–45.

1965.—Schulthess, A. v. Neue äthiopische Eumenidinen (Vespiden). Verh. zool.-bot. Ges. Wien **73** (1923) 1924 pp. 1–4. [Hym.]

1966.—Schulthess, A. de. Contribution à la connaissance de la faune des Hyménoptères de l'Afrique du Nord. Bull. Soc. Hist. nat. Afr. N. Algiers **15** 1924 pp. 293–320.

Schulthess, A. v. *see* Friese & Schulthess.

1967.—Schultz, V. G. M. Neues über *Hydrilla kitti* Rbl. Ent. Zs. Frankfort o. M. **37** 1924 pp. 48–49. [Lep.]

1968.—Schultz, V. G. M. Ei, Raupe und Puppe von *Agrotis ocellina* Hb. Zs. wiss. Insektenbiol. Berlin **19** 1924 pp. 64–67. [Lep.]

1969.—Schultze, W. A monograph of the Pachyrrhynchid group of the Brachyderinae, Curculionidae: Parts I and II. Philipp. J. Sci. Manila **24** 1924 pp. 309–366 3 pls; **25** 1924 pp. 359–390. [Col.]

1970.—Schulze, H. Über die Putztätigkeit von *Habrobracon*; zugleich ein Beitrag zur Sinnesphysiologie und Psychologie dieser Schlupfwespe. Zool. Anz. Leipzig **59** 1924 pp. 313–322 1 fig. [Hym.]

1971.—Schulze, H. Über die Fühlerhaltung von *Habrobracon jugl.* Ash. (Braconidae); zugleich eia Beitrag zur Sinnesphysiologie und Psychologie dieser Schlupfwespe. Zool. Anz. Leipzig **61** 1924 pp. 122–134 9 figs. [Hym.

1972.—Schumacher, F. Auftreten der Bergzikade in der Mark Brandenburg und Uebersicht über die deutschen Formen. (Hem. Homopt.) D. ent. Zs. Berlin **1924** pp. 329–334.

1973.—Schumacher, F. Zwei übersehene Hemipteren-Gattungen. D. ent. Zs. Berlin **1924** pp. 335–337.

1974.—Schumacher, F. *Sigara* vs. *Corixa* (Rhynch.). D. ent. Zs. Berlin **1924** pp. 337–339. [Hem.]

1975.—Schuster, A. Tenebrioniden aus der Cyrenaica (Col.). Mem. Soc. ent. ital. Genoa **1** 1922 pp. 14–23.

1976.—Schuurmans Stekhoven Jr., J. H. The Blood-sucking Arthropods of the Dutch East Indies. IV. The Tabanids from Buru. The genera *Tabanus* and *Chrysops.* Treubia Buitenzorg **5** 1924 pp. 299–330 4 figs. 3 col. pls. [Dipt.]

1977.—Schwanwitsch, B. N. On the ground-plan of wing-pattern in Nymphalids and certain other families of the Rhopalocerous Lepidoptera. Proc. Zool. Soc. London **1924** pp. 509–528 4 pls. [Lep.]

1978.—Schwartz, W. Untersuchungen über die Pilzsymbiose der Schildläuse. Biol. Zentralbl. Leipzig **44** 1924 pp. 487–527 21 figs. [Hom.]

1979.—Schwarzer, B. Neue Indomalayische Cerambyciden. Treubia Buitenzorg **5** 1924 pp. 236–238. [Col.]

1980.—Schweppenburg, G. v. Anmerkungen zur Subspeciesfrage. Unter besonderer Berücksichtigung der Ornithologie. Zool. Jahrb. Jena Abt. System. **49** 1924 pp. 131–196.

1981.—Schwingenschuss, L. *Tapinostola bondii* ab. n. *impura* & *Agrotis latens* ab. n. *obscura.* Verh. zool.-bot. Ges. Wien **73** (1923) 1924 pp. (27)–(28). [Lep.]

1982. Schwingenschuss, L. Die paläarktischen *Psodos*-Formen. Verh. zool.-bot. Ges. Wien **73** (1923) 1924 pp. (79)–(84). [Lep.]

1983.—Scott, H. Coleoptera: Ptinidae and Anobiidae of the Seychelles. Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 345–426 42 figs.

Scott, H. *see* Andrewes & Scott.

1984.—Searle, J. Aquatic housebuilders. Vict. Nat. Melbourne **40** 1924 pp. 241–244 9 figs. [Neur.]

1985.—Séguy, E. Les Insectes parasites de l'homme et des animaux domestiques. Paris, Lechevalier 1924 422 pp. 463 figs.

1986.—Séguy, E. Les moustiques de l'Afrique mineure, de l'Egypte et de la Syrie. Encyc. Ent. Sér. A. **1** 257 pp. 29 pls. 106 figs. 10 maps. Paris, Lechevalier 1924. [Dipt.]

1987.—Seidel, F. Die Geschlechtsorgane in der Embryonalen Entwicklung von *Pyrrhocoris apterus* L. Zs. Morph. Oekol. Tiere Berlin 1924 **1** pp. 429–506 39 figs. [Hem.]

1988.—Seiler, J. Furchung des Schmetterlingeies ohne Beteiligung des Kernes. Biol. Zentralbl. Leipzig **44** 1924 pp. 68–76 4 figs. [Lep.]

1989.—Seitz, A. Über paläarktische *Papilio*-Raupen. Senckenbergiana Frankfort o. M. **5** 1923 pp. 239–240 6 figs. [Lep.]

1990.—Seitz, A. Die Gross-schmetterlinge der Erde, Stuttgart: Fauna indoaustralica **9** 1923 pp. 897–936; Fauna americana **7** 1924 pp. 15–92; Fauna africana **13** 1923 pp. 401–416, 433–448, 1924 pp. 417–432.—*See* **Seitz, Fruhstorfer, Draudt, Aurivillius.**

1991.—Seitz, A. Verkehr und Entomologie. Ent. Rdsch. Stuttgart **41** 1924 pp. 5–6, 12, 15–16, 18–19, 24.

1992.—Seitz, A. Zur Phylogenie des Insektenstammes. Ent. Rdsch. Stuttgart **41** 1924 pp. 21–23, 26–27, 29–31.

1993.—Seitz, A. Zur Sinnestätigkeit der Lepidopteren. Ent. Rdsch. Stuttgart **41** 1924 pp. 39–40.

1994.—Seitz, A. Zur Nomenclaturfrage. Ent. Rdsch. Stuttgart **41** 1924 pp. 43–44, 47–48.

Seitz, A. *see* Andres & Seitz.

1995.—Semichon, L. L'articulation fémoro-tibiale des Criquets (Orth.). Bull. Soc. ent. France Paris **1924** pp. 162–164 1 fig.

1996.—Semichon, L. Sur le tissu adipeux dans les ailes de l'Hyponomeute (Lep:). Bull. Soc. ent. France Paris **1924** pp. 207–208.

1997.—Senior-White, R. Catalogue of Indian insects. Part 4. Trypetidae (Trypaneidae). Calcutta Central Govt. Ptg. Br. 1924 33 pp. [Dipt.]

1998.—Senior-White, R. New Ceylon Diptera. Part III. Spolia Zeylanica Colombo **12** 1924 pp. 375–406 5 figs.

1999.—Senior-White, R. New and little known Oriental Tachinidae. Spolia Zeylanica Colombo **13** 1924 pp. 103–119 4 figs. [Dipt.]

2000.—Senior-White, R. A revision of the sub-family Sarcophaginae in the Oriental Region. Rec. Ind. Mus. Calcutta **26** 1924 pp. 193–283 12 pls. [Dipt.]

Senior-White, R. *see* Patton & Senior-White.

2001.—Seurat, L. G. Moeurs et évolution d'un Tipulide à larve et nymphe marines. Bull. Soc. Hist. nat. Afr. N. Algiers **15** 1924 pp. 113–121 1 pl. [Dipt.]

2002.—Sevastopulo, D. G. Notes on the Lepidoptera of St. Germain, Seine et Oise. Entomologist London **57** 1924 pp. 113–115.

2003.—Seydel, C. Ueber eine äusserst wirksame, praktische und sparsame Vorrichtung zur Abwehr bzw. Abtötung von Raub-Insekten in entomologischen Sammlungen. Zs. wiss. Insektenbiol. Berlin **19** 1924 pp. 220–223 3 figs.

2004.—Seydel, C. *Eryphanis seleucida* (Hew.) ♂ (Lep. Brassol.). Neue Beitr. syst. Insektenk. Berlin **3** 1924 pp. 30–32.

2005.—Seydel, C. *Lymanopoda excisa decorata,* subsp. n. (Lep. Satyr.). Neue Beitr. syst. Insektenk. Berlin **3** 1924 p. 32.

2006.—Seyrig, A. Accouplement des Ichneumons. Ann. Soc. ent. France Paris **92** (1923) 1924 p. 300 1 fig. [Hym.]

2007.—Seyrig, A. Observations sur la biologie des Ichneumons. Ann. Soc. ent. France Paris **92** (1923) 1924 pp. 345–362. [Hym.]

2008.—Shannon, R. C. Notes on the maxillary teeth of *Anopheles.* Proc. Ent. Soc. Washington **26** 1924 pp. 142–143. [Dipt.]

2009.—Shannon. R. C. Change of preoccupied name (Dip.). Proc. Ent. Soc. Washington **26** 1924 p. 178.

2010.—Shannon, R. C. North American species of *Ferdinandea* (Diptera : Syrphidae). Proc. Ent. Soc. Washington **26** 1924 pp. 214–215.

2011.—Shannon, R. C. Notes on Calliphoridae. Insec. Insc. Menst. Washington **12** 1924 p. 14. [Dipt.]

2012.—Shannon, R. C. Some special features of the wings of Diptera. Insec. Insc. Menst. Washington **12** 1924 pp. 34–36 1 pl.

2013.—Shannon, R. C. Nearctic Calliphoridae, Luciliini (Diptera). Insec. Insc. Menst. Washington **12** 1924 pp. 67–81.

2014.—Shannon, R. C. & **Bromley,** S. W. Radial venation in the Brachycera (Diptera). Insec. Insc. Mens. Washington **12** 1924 pp. 137–140 2 pls.

2015.—Shannon, R. C. & **Dobroscky,** I. D. The North American bird parasites of the genus *Protocalliphora* (Calliphoridae, Diptera). J. Washington Acad. Sci. **14** 1924 pp. 247–253.

Shannon, R. C. *see* Dyar & Shannon.

2016.—Shapley, H. Note on the thermokinetics of Dolichoderine ants. Proc. Nat. Acad. Sci. Washington **10** 1924 pp. 436–439. [Hym.]

2017.—Shcherbinovski, N. S. Influence de l'inanition larvaire sur la productivité sexuelle de l'insecte parfait. La Défense des Plantes Leningrad **1** 1924 pp. 124–126. [In Russian.]

2018.—Sheldon, W. G. The type-specimens of *Peronea cristana* abs. *curtisana* (Desvignes) and *tolana* (Desvignes) identified. Entomologist London **57** 1924 pp. 97–99. [Lep.]

2019.—Sheljuzhko, L. Zwei neue palaearktische Aegeriiden-Arten. D. ent. Zs. Iris, Dresden **38** 1924 pp. 183–185. [Lep.]

2020.—Sheljuzhko, L. *Zygaena centaureae* F. d. W. und ihr Vorkommen in der Ukraine. Mitt. münchn. ent. Ges. **14** 1924 pp. 27–37. [Lep.]

2021.—Sheljuzhko, L. Eine verspätete Antwort. (Antwort auf die "Apologie" des Herrn F. Bryk.). Mitt. münchn. ent. Ges. **14** 1924 pp. 37–52, 55–56. [Lep.]

2022.—Sheljuzhko, L. Uebersicht der kaukasischen Rassen von *Parnassius apollo* L. Mitt. münchn. ent. Ges. **14** 1924 pp. 42–54. [Lep.]

2023.—Skeljuzhko, L. Neue Erebien aus Siberia. Ent. Anz. Vienna **4** 1924 pp. 165–167. [Lep.]

2024.—Shepherd, D. Life-history and biology of *Echocerus cornutus* (Fab.). J. Econ. Ent. Geneva N.Y. **17** 1924 pp. 572–577. [Col.]

2025.—Shotwell, R. L. A new species of the mealy-bugs. Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 353–354 1 fig. [Hom.]

2026.—Sicard, A. Un *Scymnus* (*Pullus*) nouveau de Mexique (Col., Coccinellidae). Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 531–532.

2027.—Sich, A. Larval habits of *Teichobia verhuellella*, Stainton. Ent. Rec. London **36** 1924 pp. 65–68. [Lep.]

2028.—Silvestri, F. Descripción de un nuevo género y tres especies nuevas de Ortheziinae (Hemipt., Coccidae), de España y de Costa Rica. Bol. R. Soc. esp. Hist. nat. Madrid **24** 1924 pp. 169–176 9 figs.

2029.—Silvestri, F. A new myrmecophilous genus of Coccidae (Hemiptera) from India. Rec. Ind. Mus. Calcutta **26** 1924 pp. 311–315 5 figs.

2030.—Simmel, R. Zur Lebensweise des *Leperisinus orni* Fuchs im Vergleiche mit *Leperisinus fraxini* Panz. Ent. Bl. Berlin **20** 1924 pp. 225–228. [Col.]

2031.—Sinton, J. A. Notes on some Indian species of the genus *Phlebotomus*. Parts III–IX. Ind. J. Med. Res. Calcutta **11** 1924 pp. 807–815, 817–823, 1007–1013, 1015–1027, 1029–1034, 1035–1049 4 tables 4 pls.; **12** 1924 pp. 261–271 1 pl. [Dipt.]

2032.—Sirguey, P. Description de formes nouvelles. Misc. ent. Castanet-Tolosan **27** 1924 pp. 58–59. [Col.]

2033.—Sirguey, P. *Omaseus vulgaris* L. var. nouvelle. Misc. ent. Castanet-Tolosan **28** 1924 pp. 33–34. [Col.]

2034.—Sirguey, P. Contribution à la description des *Thorectes armifrons* et *trituberculatus* Reitter. Echange Moulins **39** 1924 p. 18. [Col.]

2035.—Sjöstedt, Y. Ueber das unterirdische Nest einer bisher unbekannten Termite aus Kongo. Ark. Zool. Stockholm **15** no. 20 1924 8 pp. 1 fig. 3 pls. [Isopt.]

2036.—Sjöstedt, Y. Revision der Truxaliden-Gattung *Cannula* Bol. Ark. Zool. Stockholm **15** no. 21 1924 10 pp. 2 pls. [Orth.]

2037.—Sjöstedt, Y. West- und Südafrikanische Acridiodeen. Ark. Zool. Stockholm **15** no. 22 1924 20 pp. 2 pls. [Orth.]

2038.—Sjöstedt, Y. Zoological Results of the Swedish Expedition to Central Africa, 1921. Insecta. 2. Mantodea und Phasmodea. Ark. Zool. Stockholm **16** no 6. 1924 pp. 1–20 10 figs. [Orth.] [In German.]

2039.—Sjöstedt, Y. Neue Termiten im Kongo-Museum (Vorläufige Mitteilung). Rev. zool. afr. Brussels **12** 1924 pp. 39–42. [Isopt.]

2040.—Sjöstedt, Y. Neue Arten und Gattungen afrikanischer Termiten (Vorläufige Mitteilung). Rev. zool. afr. Brussels **12** 1924 pp. 253–257. [Isopt.]

2041.—Sjöstedt, Y. Neue afrikanische Termiten. Rev. zool. afr. Brussels **12** 1924 pp. 490–494. [Isopt.]

2042.—Sjöstedt, Y. Weitere Neuheiten von der afrikanischen Termitenfauna. Rev. zool. afr. Brussels **12** 1924 pp. 495–497. [Isopt.]

2043.—Skinner, H. *Kloneus babayaga* (Lepid.: Sphingidae). Ent. News Philadelphia **35** 1924 pp. 229–230 1 pl.

2044.—Skinner, H. & **Williams,** R. C., Jr. On the male genitalia of the Hesperiidae of North America. Trans. Amer. Ent. Soc. Philadelphia **50** 1924 pp. 57–74 24 figs. 141–156 17 figs. pp. 177–208 26 figs. [Lep.]

2045.—Smirnov, E. Zur Kenntnis der Gattung *Cerioides* Rond. Zool. Anz. Leipzig **58** 1924 pp. 349–352 2 figs. [Dipt.]

2046.—Smirnov, E. Eine neue Syrphiden-Gattung aus Turkestan. Ent. Mitt. Berlin **13** 1924 pp. 94–95. [Dipt.]

2047.—Smith, M. R. An annotated list of the Ants of Mississippi (Hym.). Ent. News Philadelphia **35** 1924 pp. 47, 54, 77–85 & 121–127.

2048.—Smith, M. R. A new species of ant from Kansas (Hym.: Formicidae). Ent. News Philadelphia **35** 1924 pp. 250–253.

2049.—Smith, S. G. Records of experiments with light for attracting British moths, 1919–1923. Chester 1923 pp. 1–35 4 pls.

2050.—Snodgrass, R. E. The tent caterpillar. Smithsonian Rept. **1922** Washington 1924 pp. 329–362 1 pl. 21 figs. [Lep.]

2051.—Snodgrass, R. E. Insect musicians, their music and their instruments. J. Washington Acad. Sci. **14** 1924 p. 202.

2052.—Snodgrass, R. E. Anatomy and metamorphosis of the apple maggot, *Rhagoletis pomonella,* Walsh. J. Agric. Res. Washington **28** 1924 pp. 1–36 6 pls. 8 figs. [Dipt.]

2053.—Snyder, T. E. Descriptions of new species and hitherto unknown castes of Termites from America and Hawaii. Proc. U. S. Nat. Mus. Washington **64** 1924 art. 6 no. 2496 pp. 1–40 5 pls.

2054.—Snyder, T. E. "Adaptations" to social life: the Termites (Isoptera). Smithsonian Misc. Coll. Washington **76** no. 12 (Pubn. no. 2786) 1924 4 pp. 3 pls.

2055.—Snyder, T. E. New Termites and hitherto unknown castes from the Canal Zone, Panama. J. Agric. Res. Washington **29** 1924 pp. 179–193 2 pls. 9 figs. [Isopt.]

2056.—Snyder, T. E. A new subgenus of *Nasutitermes* Banks (Isopt.). Proc. Ent. Soc. Washington **26** 1924 pp. 20–24, 196 1 pl.

2057.—Snyder, T. E. Note on mating flight of *Hexagenia bilineata* Say (Plectoptera). Proc. Ent. Soc. Washington **26** 1924 p. 24.

2058.—Snyder, T. E. Description of a new termite from Porto Rico. Proc. Ent. Soc. Washington **26** 1924 pp. 131–132 1 fig. [Isopt.]

2059.—Snyder, T. E. A non-subterranean Termite in Virginia. Proc. Ent. Soc. Washington **26** 1924 pp. 207–209. [Isopt.]

2060.—Snyder, T. E. An extraordinary new *Rhinotermes* from Panama. Proc. Biol. Soc. Washington **37** 1924 pp. 83–85 1 pl. [Isopt.]

2061.—Snyder, T. E. A new *Prorhinotermes* from Panama. J. Washington Acad. Sci. **14** 1924 pp. 43–44 2 figs. [Isopt.]

2062.—Snyder, T. E. Whence the Termites of Hawaii? Proc. Hawaiian Ent. Soc. Honolulu **5** 1924 pp. 381–384.

2063.—Solowiow, P. Biologische Beobachtungen über Holzläuse (*Atropos pulsatoria* L.). Zool. Anz. Leipzig **59** 1924 pp. 238–240. [Psocopt.]

2064.—Solowiow, P. Biologische Beobachtungen über die Holzlaus (*Atropos pulsatoria* L.). Zs. wiss. Insektenbiol. Berlin **19** 1924 pp. 46–48. [Psocopt.]

2065.—Solowiow, P. Biologisches über *Cataclysta lemnata* L. (Lepidoptera, Pyralidae). Zs. wiss. Insektenbiol. Berlin **19** 1924 pp. 174–176.

2066.—Spaeth, F. Voyage de Ch. Alluaud et R. Jeannel en Afrique orientale (1911–1912). xviii. Cassidinae. Paris **1924** pp. 275–363 1 photo. [Col.]

2067.—Speiser, P. Ueber einige Scatopsiden (Dipt.). Schr. physik. Ges. Königsberg **61–62** 1920–21 pp. 82–84.

2068.—Speiser, P. Die Entwickelung und den Stand unserer Kenntnisse von der Dipteren-familie Phoridae in Ostpreussen. Schr. physik. Ges. Königsberg **63** 1922 pp. 128–129.

2069.—Speiser, P. Vorarbeiten zu einer Dipteren-fauna der Provinz Ostpreussen. Schr. physik. Ges. Königsberg **64** 1924 pp. 7–18 1 fig.

2070.—Speiser, P. Eine Uebersicht über die Dipterenfauna Deutsch-Ostafrikas. *In*: Beitr. aus d. Tierkunde, Widmungsschr. für Dr. M. Braun, Königsberg in Pr., Gräfe & Unzer, 1924 pp. 90–156.

2071.—Speiser, P. Beiträge zur Kenntnis der Syrphiden (Dipt.). Wiener ent. Ztg. Vienna **41** 1924 pp. 42–55.

2072.—Spessivtseff, P. Grankottmätarna (*Eupithecia abietaria* och *strobilata*) och deras skadegörelse. Medd. Statens Skogsförsöksanst.Stockholm **21** 1924 pp. 297–310 14 figs. [Lep.]

Spett, G. *see* Levitt & Spett.

2073.—Speyer, W. Die lokomotorischen Extremitäten der Larve von *Dytiscus marginalis* L. Schr. physik. Ges. Königsberg **61–62** 1920–21 pp. 43–54 1 fig. [Col.]

2074.—Speyer, W. Die Ernährungsmodifikationen der Organismen unter besondere Berücksichtigung der fleischfressenden Tiere. Beitr. aus d. Tierkunde Widmungsschr. für Dr. M. Braun, Königsberg i. Pr. 1924 pp. 16–20.

Speyer, W. *see* Blunck & Speyer.

2075.—Spuler, A. Species of subgenera *Collinella* and *Leptocera* of North America. Ann. Ent. Soc. America Columbus **17** 1924 pp. 106–116 1 pl. [Dipt.]

2076.—Spuler, A. North American species of the subgenera *Opacifrons* Duda and *Pteremis* Rondani of the genus *Leptocera* Olivier (Diptera, Borboridae). Psyche Boston **31** 1924 pp. 121–134 1 pl.

2077.—Spuler, A. North American species of the genera *Sphaerocera* and *Aptilotus* (Diptera, Borboridae). Pan-Pacific Ent. S. Francisco **1** 1924 pp. 66–71 4 figs.

2078.—Stackelberg, A. von. *Tachytrechus fedtschenkoi* sp. nov. (= *T. eunotus* Lw. in litt. in coll. Fedtschenkoi) (Dipt., Dolichopod.). Ent. Mitt. Berlin **13** 1924 pp. 12–13.

2079.—Stackelberg, A. von. Syrphidarum novarum palaearcticarum diagnoses. Wiener ent. Ztg. Vienna **41** 1924 pp. 25–29. [Dipt.]

2080.—Stadler, H. Blutkiemen bei einer köcherbauenden Trichopterenlarve (*Lasiocephala basalis*). Arch. Hydrobiol. Stuttgart **15** 1924 pp. 250–252 2 pls.

2081.—Stadler, H. Einiges über die Tierwelt Unterfrankens. II. Beitrag. Arch. Natg. Berlin **90** 1924 Abt. A Heft 1 pp. 169–201 1 map.

2082.—Stadler, H. Einiges über Wespenbauten. Verh. D. zool. Ges. Berlin **29** 1924 pp. 78–81 2 pls. [Hym.]

2083.—Stäger, R. Ist der Ameisenlöwe eine Reflexmaschine? Schweizer ent. Anz. Zürich **3** 1924 pp. 3–4. [Neur.]

2084.—Stäger, R. Andere Beobachtungen am Ameisenlöwen. Schweizer ent. Anz. Zürich **3** 1924 pp. 22–23. [Neur.]

2085.—Stäger, R. Die Waldameise als Insektenvertilgerin. Zs. wiss. Insektenbiol. Berlin **19** 1924 pp. 68–77. [Hym.]

2086.—Stäger, R. Beitrag zur Biologie hochalpiner Psychiden. Zs. wiss. Insektenbiol. Berlin **19** 1924 pp. 131–134, 163–168, 181–186, 216–220. [Lep.]

2087.—Stammer, H. J. Die Larven der Tabaniden. Zs. Morph. Oekol. Tiere Berlin **1** 1924 pp. 121–170 2 pls. 20 figs. [Dipt.]

2088.—Stättermayer, J. Neue Aberrationen von *Arctia caja* L. Ent. Anz. Vienna **4** 1924 pp. 69–71. [Lep.]

2089.—Stättermayer, J. Neue aberrative Formen aus der Familie der Papilionidae. Ent. Anz. Vienna **4** 1924 pp. 133–135. [Lep.]

2090.—Staubenrauch, —. Ueber *Erebia nerine* (*reichlini*). Mitt. münchn. ent. Ges. **14** 1924 pp. 66–69. [Lep.]

2091.—Stauder, H. Beiträge zur Sammeltechnik und Biologie begehrter Arten und Formen von Lepidopteren; Beschreibung berühmter Flugplätze. Ent. Anz. Vienna **4** 1924 pp. 1–5,

13–17, 25–29, 38–42, 51–54, 61–64, 73–75, 79–80, 88–90, 93–95, 104–106, 112–114, 120–122, 127–129, 135–138, 141–142.

2092.—Stauder, H. Eine neue *Apollo*-form. Ent. Anz. Vienna **4** 1924 pp. 33–34. [Lep.]

2093.—Stauder, H. Neue Formen von *Erastria* (*Emmelia*) *trabealis* Sc. Ent. Anz. Vienna **4** 1924 pp. 109–110. [Lep.]

2094.—Stauder, H. Altes u. Neues über *Coenonympha pamphilus* L. Intern. ent. Zs. Guben **17** 1924 pp. 151–154, 158–159. [Lep.]

2095.—Stauder, H. *Parnassius apollo* (*decora*) f. n. *tetradynomos* m. Intern. ent. Zs. Guben **18** 1924 pp. 9–10. [Lep.]

2096.—Stauder, H. Beitrag zur Rassenfrage von *Zygaena achilleae* Esp. Intern. ent. Zs. Guben **18** 1924 pp. 50–54. [Lep.]

2097.—Stauder, H. *Pieris rapae* f. *flavescens* Rbr. Intern. ent. Zs. Guben **18** 1924 p. 153. [Lep.]

2098.—Stauder, H. Lepidoptera aus Unteritalien. I. Soc. ent. Stuttgart **39** 1924 pp. 3–4, 7–8, 10–12, 15–16, 19–20, 23–24, 26–28, 29–31, 34–35, 38–39.

2099.—Stauder, H. *Parnassius apollo* f. *albofimbriata* Stdr. n. ab. D. ent. Zs. Iris Dresden **37** 1923 p. 76. [Lep.]

2100.—Stauder, H. Ueber osteuropäische und transkaukasische Syntomiden. D. ent. Zs. Iris Dresden **38** 1924 pp. 219–222. [Lep.]

2101.—Stauder, H. Das Weib von *Syntomis herthula* Stdr. und eine zweite Generation der Art. Mitt. münchn. ent. Ges. **14** 1924 pp. 56–59. [Lep.]

2102.—Stauder, H. Neue Palaearktenformen ii. Mitt. münchn. ent. Ges. **14** 1924 pp. 59–66. [Lep.]

2103.—Stauder, H. Teriolensia. I. D. ent. Zs. Berlin **1924** pp. 1–29. [Lep.]

2104.—Stein, P. Die verbreitetsten Tachiniden Mitteleuropas nach ihren Gattungen und Arten. Arch. Natg. Berlin **90** 1924 Abt. A Heft 6 pp. 1–271. [Dipt.]

2105.—Stelfox, A. W. Notes on Irish Hymenoptera Aculeata with special reference to the Dublin District. Irish Nat. Dublin **33** 1924 pp. 13–23.

2106.—Stellwaag, F. *Tinea cloacella* Hw. und *Tinea granella* L. Zs. angew. Ent. Berlin **10** 1924 pp. 181–188 4 figs. [Lep.]

2107.—Stellwaag, F. Der Baumweissling *Aporia crataegi* L. Zs. angew. Ent. Berlin **10** 1924 pp. 273–312 23 figs. [Lep.]

2108.—Stephan, J. Moos- und Flechtenfresser unter den Raupen. Ent. Jahrb. Leipzig **32** 1923 pp. 95–100. [Lep.]

2109.—Stephan, J. Die Schwärmer der Grafschaft Glatz. D. ent. Zs. Iris Dresden **38** 1924 pp. 13–22. [Lep.]

2110.—Stephan, J. *Phalera bucephala* L. Ent. Zs. Frankfort o. M. **37** 1924 p. 44. [Lep.]

2111.—Stephan, J. Etwas über *Nemeobius lucina* L. Zs. wiss. Insektenbiol. Berlin **19** 1924 pp. 48–50. [Lep.]

2112.—Stephan, J. Zwei *Argynnis* Funde. Ent. Anz. Vienna **4** 1924 pp. 49–51. [Lep.]

2113.—Sterzl, A. *Zygaena laeta* Hbn. ab. *eos* Sterzl. Verh. zool.-bot. Ges. Wien **73** (1923) 1924 pp. (15)–(16). [Lep.]

2114.—Stichel, W. Bericht über die Hemipterenliteratur Deutschlands mit Berücksichtigung einiger österreichischer, ungarischer, bulgarischer und rumänischer Arbeiten in den Kriegsjahren, 1917–1918. Zs. wiss. Insektenbiol. Berlin **19** 1924 pp. 104–108. [Hem.]

2115.—Stichel, H. Beitrag zur Kenntnis der Riodinidenfauna Südamerikas. V. Niederländisch Guayana. Zs. wiss. Insektenbiol. Berlin **19** 1924 pp. 160–161. [Lep.]

2116.—Stichel, H. Beiträge zur Kenntnis der Riodinidenfauna Südamerikas. VII. Nord-Brasilien (Amazonas). Zs. wiss. Insektenbiol. Berlin **19** 1924 pp. 245–250.

2117.—Stichel, H. Zur Systematik der Riodinidae (Lep., Rhop.). N. Beitr. syst. Insektenk. Berlin **3** 1924 pp. 1–3.

2118.—Stichel, H. Bemerkungen zur Gattung *Abisara* Feld. und Beschreibung einer neuen Art (Lep., Riodin.). N. Beitr. syst. Insektenk. Berlin **3** 1924 pp. 39–40.

2119.—Stichel, H. Beiträge zur Kenntnis der Riodinidenfauna Südamerikas (Lep.). D. ent. Zs. Berlin **1924** pp. 137–151.

2120.—Stichel, W. Insekten in Meeresanspülicht. Ent. Zs. Frankfort o. M. **38** 1924 p. 2.

2121.—Stichel, W. Die einheimischer *Piesma*-Arten. Intern. ent. Zs. Guben **18** 1924 pp. 146–149. [Hem.]

2122.—Stichel, W. Die Hemipterensammlung des Zoologischen Institutes in Berlin. Intern. ent. Zs. Guben **17** 1924 pp. 155–157, 165–166, 175–176, 186–187, 195–197.

2123.—Stichel, W. Heteropterologische Notizen. Intern. ent. Zs. Guben **18** 1924 pp. 201–203. [Hem.]

2124.—Stöckhert, E. Ueber Entwicklung und Lebensweise des Bienengattung *Halictus* Latr. und ihrer Schmarotzer [Hym.]. Zugleich ein Beitrag zur Stammesgeschichte des Bienenstaates. Erster Teil. Die Biologie der Gattung *Halictus* Latr. Konowia Vienna **2** 1923 pp. 48–64, 146–165, 216–247.

2125.—Stöckhert, E. Ueber einige neue deutsche *Andrena*-Arten (Hym.). Arch. Natg. Berlin Abt. A **90** 1924 Heft 4 pp. 165–179.

2126.—Stöckhert, F. K. Über Gynandromorphie bei Bienen und die Beziehungen Zwischen den primären und sekundären Geschlechtscharakteren der Insekten. Arch. Natg. Berlin Abt. A **90** 1924 Heft 2 pp. 109–131.

2127.—Stolz, H. Ueber *Bythinus simplex* Baudi als Subspezies des *Bythinus crassicornis* Motsch. Verh. zool.-bot. Ges. Wien **73** (1923) 1924 pp. (64)–(69) 8 figs. [Col.]

2128.—Stolz, H. *Bythinus monstrosetibialis* Stolz sp. n. Verh. zool.-bot. Ges. Wien **73** (1923) 1924 pp. (71)–(72). [Col.]

2129.—Stoner, D. The Scutelleroidea of Iowa. Univ. Iowa Studies Nat. Hist. **8** no. 4 1920 140 pp. 7 pls. [Hem.]

2130.—Stoner, D. Report on the Scutelleroidea collected by the Barbados-Antigua Expedition from the University of Iowa in 1918. Univ. Iowa Studies Nat. Hist. **10** no. 1 1922 pp. 3–17 3 pls. [Hem.]

2131.—Stoner, D. The Scutelleroidea of the Douglas Lake region. Univ. Iowa Studies Nat. Hist. **10** no. 1 1922 pp. 45–65. [Hem.]

2132.—Strand, E. Lepidoptera aus Südwest-Australien. D. ent. Zs. Iris Dresden **38** 1924 pp. 135–148.

2133.—Strickland, C. The Anophelines *funestus*, *minimus* and *aconitus* including a description of the larva of *minimus*. Ind. J. Med. Res. Calcutta **12** 1924 pp. 145–152 2 tables 2 pls. [Dipt.]

2134.—Strohm, K. Die Heuschreckenfauna von Baden. Mitt. badischen ent. Ver. Freiburg i. Br. **1** 1924 pp. 51–64, 87–103. [Orth.]

2135.—Strohm, K. Beitrag zur Kenntnis der Bienenfauna von Baden. Mitt. badischen ent. Ver. Freiburg i. Br. **1** 1924 pp. 123–137. [Hym.]

Stsherbinovskij, N. *see* Shcherbinovski, N. S.

2136.—Stumper, R. Une termitière singulière. La Nature Paris **1924** pp. 351–352 2 figs. [Isop.]

2137.—Süffert, F. Morphologie und Optik der Schmetterlingsschuppen, insbesondere die Schillerfarben der Schmetterlinge. Zs. Morph. Oekol. Tiere Berlin **1** 1924 pp. 171–308 5 pls. 16 figs. [Lep.]

2138.—Süffert, F. Bestimmungsfaktoren des Zeichnungsmusters beim Saison-Dimorphismus von *Araschnia levana-prorsa*. Biol. Zentralbl. Leipzig **44** 1924 pp. 173–188 2 figs. [Lep.]

2139.—Sulc, K. Ovýznamu vóskových žlaz u housenek motýle. *Hesperia comma* L. [On the significance of the wax glands in the larvae of *H. comma.*] Ceskoslov. ent. spolecnosti Jubilejni Sbornik 1924 pp. 97–100 3 figs. [Lep.] [With German summary.]

2140.—Surcouf, J. M. R. Note diptérologique sur les variations du *Thérioplodes* [sic] *muhlfeldi* Brauer. Ann. Soc. ent. France Paris **93** 1924 p. 22.

2141.—Surcouf, J. M. R. Description d'une espèce nouvelle de *Pangonia* paléarctique. Encyc. ent. Sér. B. **2** Dipt. **1** Paris Lechevalier 1924 p. 65 [Dipt.]

2142.—Surcouf, J. M. R. & **Fischer,** E. Notes sur la vie larvaire et nymphale du *Tabanus bromius* L. Bull. Soc. ent. France Paris **1924** pp. 232–237 7 figs. [Dipt.]

2143.—Sustera, O. Beiträge zur Kenntnis der paläarktischen Psammochariden (Hymen.). III. *Cryptochilus* Panz. Ceskoslov. ent. spol. Jubilejni Sbornik Prague 1924 pp. 71–96.

Svenson, H. K. *see* Mavor & Svenson.

2144.—Swaine, J. M. The allies of *Ips confusus* Lec. in Western America (family Ipidae, Coleoptera). Canad. Ent. Orillia **56** 1924 pp. 69–72.

2145.—Swaine, J. M. New species of the genus *Phloeosinus* Chapuis (Coleoptera). Canad. Ent. Orillia **56** 1924 pp. 144–149.

2146.—Swaine, J. M. Four new species of *Carphoborus* (Ipidae, Coleoptera). Canad. Ent. Orillia **56** 1924 pp. 234–236.

2147.—Swaine, J. M. The species of *Scierus* Lec. (Coleoptera). Canad. Ent. Orillia **56** 1924 pp. 287–288.

2148.—Swaine, J. M., **Craighead,** F. C. & **Bailey,** I. W. Studies on the Spruce Budworm (*Cacoecia fumiferana* Clem.). Canada Dept. Agric. N.S. Bull. 37 (Ent. Bull. **25**) Ottawa 1924 91 pp. 25 pls. [Lep.]

Swett, L. W. *see* Cassino & Swett.

2149.—Swiatkiewicz, M. Seltenere und für Polenfauna neue Lepidopteren. Polsk. Pismo Ent. Lemberg **3** 1924 pp. 94–100.

2150.—Szilady, Z. New or little-known Horseflies (Tabanidae). Biol. Hung. Budapest **1** 1923 pp. 1–39 1 pl. 29 figs. [Dipt.]

2151.—Takahashi, R. Aphididae of Formosa. Part 3. Govt. Res. Inst. Taihoku Formosa 1924 121 pp. 10 pls. [Hom.]

2152.—Takahashi, R. Some Aphids from the island Palau (Micronesia). Trans. N. H. Soc. Formosa **14** 1924 p. 30. [Hom.] [Not seen.]

2153.—Takahashi, R. Life-history of Blattidae. Dobuts. Z. Tokyo **36** 1924 pp. 215–230. [Orth.] [In Japanese.]

2154.—Takahashi, R. Some Aphididae from the Far East. Philipp. J. Sci. Manila **24** 1924 pp. 711–717. [Hom.]

2155.—Takahashi, R. On the nymphs of the Aphidinae. Proc. Ent. Soc. Washington **26** 1924 pp. 1–11 3 figs. [Hom.]

Talbot, G. *see* Joicey & Talbot; *also* Prout & Talbot.

2156.—Tams, W. H. T. Descriptions of two new species of the genus *Nygmia* (Liparidae) from East Africa. Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 502–504. [Lep.]

2157.—Tams, W. H. T. On a new species of the genus *Pachymeta* (Lasiocampidae) from South Africa. Entomologist London **57** 1924 pp. 129–132 5 figs. [Lep.]

2158.—Tams, W. H. T. Notes on *Heliconisa pagenstecheri* Hübn. in the Argentine. Entomologist, London **57** 1923 pp. 243–245 2 figs. [Lep.]

2159.—Tams, W. H. T. Notes on some species of the genus *Cosmophila* Boisd. Trans. Ent. Soc. London **1924** pp. 20–24 3 pls.

2160.—Tams, W. H. T. List of the moths collected in Siam by E. J. Godfrey, B.Sc., F.E.S. J. Nat. Hist. Soc. Siam Bangkok **6** 1924 pp. 229–289 1 pl. [Lep.]

2161.—Tarel, R. Description d'une aberration nouvelle de *Cicindela lunulata* Fbr., ab. *lebisi* T. Misc. ent. Castanet-Tolosan **27** 1924 p. 76 1 fig. [Col.]

2162.—**Tavares, J. S.** Espèces novas de Cynípides e Cecidomyias da Peninsula Iberica e descripçao de algumas já conhecidas. V. série. Brotéria Caminha ser. zool. **21** 1924 pp. 5–48 15 figs. [Hym., Dipt.]

2163.—**Tavares, J. S.** Notícias cecidológicas. Broteria Caminha ser. zool. **21** 1924 pp. 91–96. [Dipt.]

2164.—**Taylor, L. H.** Expedition of the California Academy of Sciences to the Gulf of California in 1921. Chrysididae from Lower California. Proc. Cal. Acad. Sci. San Francisco (4) **13** 1924 pp. 325–332 5 figs. [Hym.]

2165.—**Tempère, G.** Note sur *Cryptocephalus cynarae* Suffrian. Sa presence en Gironde (Col. Chrysomelidae). Proc.-verb. Soc. linn. Bordeaux **75** 1923 pp. 198–201.

2166.—**Ten Cate, J.** Contribution à la physiologie comparée du tube digestive. III. Les mouvements rythmiques spontanés de l'oesophage isolé et du gosier de *Dytiscus marginalis.* Arch. néerl. Sci. Soc. holl. Haarlem **9** 1924 pp. 598–604 3 figs. [Col.]

2167.—**Teodoro, G.** Sulla struttura delle elitre negli emitteri eterotteri. Redia Florence **15** 1924 pp. 79–86 3 figs. [Hem.]

2168.—**Teodoro, G.** Sopra un particolare organo esistente nelle elitre degli eterotteri. Redia Florence **15** 1924 pp. 87–95 9 figs. [Hem.]

2169.—**Teodoro, G.** Coccidologica. V. Sistema muscolare dei lecaniti. VI. Le glandole ceripare della *Filippia oleae.* Redia Florence **15** 1924 pp. 177–179. [Hom.]

2170.—**Teodoro, G.** Ulteriori ricerche sull'apparato di uncinamento fra elitre ed ali negli eterotteri. Boll. Soc. ent. ital. Genoa **56** 1924 pp. 34–38. [Hem.]

2171.—**Teodoro, G.** Sull'apparato di uncinamento fra elitre ed ali negli eterotteri. (Quinta Contribuzione.) Boll. Soc. ent. ital. Genoa **56** 1924 pp. 124–126. [Hem.]

2172.—**Tessmann, G.** Neue aethiopische Pterothysaniden. Mitt. zool. Mus. Berlin **10** 1921 pp. 215–216. [Lep.]

2173.—**Teyrovsky, V.** Vajíčko a kladení vaiček u sladkovodni ploštice *Cymatia coleoptrata* F. [Oviposition of *C. coleoptrata.*] Ceskoslov. ent. spol. Jubilejni Sbornik Prague 1924 pp. 100–101 3 figs. [Hem.] [With English summary.]

2174.—**Thalhammer, J.** Fauna Regni Hungariae : Diptera. Budapest 1918 pp. 5–76.

2175.—**Theobald, F. V.** New and little known British Aphides. Ent. Mo. Mag. London **60** 1924 pp. 124–130 7 figs. [Hom.]

2176.—**Theodor, O.** Pupae of some Palestinian Culicines. Bull. Ent. Res. London **14** 1924 pp. 341–345. 3 figs. [Dipt.]

2177.—**Théry, A.** Note sur les espèces japonais du genre *Chalcophorella* Kerr. (Col. Buprestidae). Bull. Soc. ent. France Paris **1924** pp. 15–16.

2178.—**Théry, A.** Note sur le genre *Paratrachys* Saund. (Col. Buprestidae) et description d'une espèce nouvelle. Bull. Soc. ent. France Paris **1924** pp. 202–207 4 figs.

2179.—**Théry, A.** Étude sur les espèces africaines appartenant au genre *Sternocera* Eschsch. (Coléoptères Buprestidae). Bull. Soc. Sci. nat. Maroc Rabat **4** 1924 pp. 72–90.

2180.—**Théry, A.** Description d'un *Stenosis* nouveau du Maroc (Coleopt., Tenebrionidae). Bull. Soc. Sci. nat. Maroc Rabat **4** 1924 pp. 149–150 1 fig.

2181.—**Thienemann, A.** Ueber die Chironomidengattung *Lundströmia* nebst einer Bestimmungstabelle für die Larven und Puppen der Sectio *Tanytarsus genuinus.* Zool. Anz. Leipzig **58** 1924 pp. 331–344. [Dipt.]

Thienemann, A. *see* Lenz & Thienemann.

2183.—**Thompson, W. R.** Les larves primaires des Tachinaires à oeufs microtypes. Ann. Parasit. hum. & comp. Paris **2** 1924 pp. 185–201 & 279–306 5 figs 4 pls. [Dipt.]

2184.—**Thorn, L. B.** Notes on the life-histories of some Victorian Lycaenid butterflies. Vict. Nat. Melbourne **41** 1924 pp. 43–50 1 pl. [Lep.]

Thorn, L. B. *see* Burns & Thorn.

2185.—Tian, A. & Cotie, J. Utilisation en biologie de la méthode microcalorimétrique ; exemple d'application. C.R. Acad. Sci. Paris **178** 1924 pp. 1390–1392.

2186.—Tichomirov, B. Méthode et appareil pour l'injection du système trachéal des insectes. La Défense des Plantes Leningrad **1** 1924 pp. 32–36 2 figs. [In Russian.]

2187.—Tiede, F. Die Lehmpelzbiene (*Anthophora parietina* Fabr.) und ihre Schmarotzer. Arch. Ver. Natg. Güstrow **73** 1920 pp. 16–21. [Hym.]

2188.—Tillyard, R. J. Studies of New Zealand Trichoptera or Caddis-flies : No. 2, descriptions of new genera and species. Trans. N.Z. Inst. Wellington **55** 1924 pp. 285–314 1 pl. 27 figs.

2189.—Tillyard, R. J. Primitive wingless insects. Part I. The silverfish, bristletails and their allies (Order Thysanura). N. Z. J. Sci. & Technol. Wellington **7** 1924 pp. 232–242 10 figs.

2190.—Tillyard, R. J. On a tertiary fossil insect wing from Queensland (Homoptera, Fulgoroidea) with description of a new genus and species. Proc. R. Soc. Queensland Brisbane **35** 1924 pp. 16–20 1 pl. 2 figs.

2191.—Tillyard, R. J. The Dragon-flies (Order Odonata) of Fiji, with special reference to a collection made by Mr. H. W. Simmonds, F.E.S., on the Island of Viti Levu. Trans. Ent. Soc. London **1923** 1924 pp. 305–346 21 figs.

2192.—Tillyard, R. J. Description of a new Paleodictyopterid. Amer. J. Sci. New Haven Conn. **7** 1924 pp. 203–207 2 pls. 1 fig.

2193.—Tillyard, R. J. Kansas Permian Insects. Part 3. The new order Protohymenoptera. Amer. J. Sci. New Haven Conn. **8** 1924 pp. 111–122 1 pl. 2 figs.

2194.—Timberlake, P. H. Descriptions of new Chalcid-flies from Hawaii and Mexico (Hymenoptera). Proc. Hawaiian Ent. Soc. Honolulu **5** 1924 pp. 395–417 8 figs.

2195.—Timberlake, P. H. Records of the introduced and immigrant Chalcid-flies of the Hawaiian Islands (Hymenoptera). Proc. Hawaiian Ent. Soc. Honolulu **5** 1924 pp. 418–449.

2196.—Timberlake, P. H. Notes on Hawaiian Aphidae, with a list of food plants (Homoptera). Proc. Hawaiian Ent. Soc. Honolulu **5** 1924 pp. 450–460.

2197.—Timberlake, P. H. & Clausen, C. P. The parasites of *Pseudococcus maritimus* (Ehrhorn) in California (Hymenoptera, Chalcidoidea). Parts I & II. Univ. California Pubns. Ent. Berkeley **3** 1924 pp. 223–292 2 pls. 8 figs.

2198.—Tindale, N. B. Review of Australian Mantidae. Part II. Rec. S. Aust. Mus. Adelaide **2** 1924 pp. 547–552 1 fig. 1 pl. [Orth.]

2199.—Todorowa, W. & Petkoff, P. Beitrag zur Macrolepidopterenfauna der Umgebung von Tzaribrod und Tru (Bulgaria). Trav. Soc. bulgar. Sci. nat. Sofia **8** 1915 pp. 128–147. [In Bulgarian ; summary in German.]

2200.—Toedtmann, W. Die Spermatozoen von *Formica rufa* L. Zool. Anz. Leipzig **58** 1924 pp. 52–55 4 figs. [Hym.]

2201.—de Toledo Piza, Junior, S. Uma nova especie de Ipidio do genero *Stephanoderes*. Rev. Soc. rur. brasileira S. Paulo **5** 1924 pp. 354–355 2 figs. [Col.]

2202.—Tomlin, J. R. le B. Notes on the Coleoptera of Glamorgan. IV. Ent. Mo. Mag. London **60** 1924 pp. 85–87.

2203.—Tonnoir, A. Les Blepharoceridae de la Tasmanie. Ann. Biol. lacustre Brussels **13** 1924 pp. 5–69 28 figs. [Dipt.]

2204.—Tonnoir, A. L. Australian Dixidae (Dipt.). Pap. & Proc. R. Soc. Tasmania Hobart **1923** 1924 pp. 58–71 7 figs.

2205.—Tonnoir, A. L. A new biting Ceratopogonid from New Zealand. Bull. Ent. Res. London **14** 1924 pp. 443–444 1 fig. [Dipt.]

2206.—Torka, V. *Andrena hattorfiana* F. Intern. ent. Zs. Guben **18** 1924 p. 129. [Hym.]

2207.—**Torre-Bueno,** J. R. de la. The nearctic *Rhagoveliae* (Heteroptera, Veliidae). Trans. Amer. Ent. Soc. Philadelphia **50** 1924 pp. 243–252.

2208.—**Torre-Bueno,** J. R. de la. On a few Heteroptera from Massachusetts. Bull. Brooklyn Ent. Soc. **19** 1924 pp. 48–51.

2209.—**Torre-Bueno,** J. R. de la. A correction in *Acalypta* (Tingididae). Bull. Brooklyn Ent. Soc. **19** 1924 p. 93.

2210.—**Torre-Bueno,** J. R. de la. A preliminary survey of the species of *Microvelia* Westwood (Veliidae, Heteroptera) of the western world, with description of a new species from the southern United States. Bull. Brooklyn Ent. Soc. **19** 1924 pp. 186–194.

2211.—**Torre-Bueno,** J. R. de la. Carbon tetrachloride for the entomologist. Ent. News Philadelphia **35** 1924 pp. 352–355 1 fig.

2212.—**Torre-Bueno,** J. R. de la. The last moult of *Lethocerus americanus* Say. Ent. News Philadelphia **35** 1924 pp. 369–370. [Hem.]

2213.—**Torre-Bueno,** J. R. de la. Three Canadian Acanthiidae (Saldidae, Heteroptera). Canad. Ent. Orillia **56** 1924 pp. 296–300.

2214.—**Torre-Bueno,** J. R. de la. Report on the Aquatic Hemiptera collected by the Barbados-Antigua Expedition from the University of Iowa in 1918. Univ. Iowa Studies Nat. Hist. **10** no. 3 1923 pp. 30–38 **1** pl.

2215.—**Tothill,** J. D. A revision of the Nearctic species of the genus *Gonia* (Diptera, Tachinidae). Canad. Ent. Orillia **56** 1924 pp. 196–200 & 206–212.

2216.—**Tothill,** J. D. A revision of the Nearctic species in the genus *Fabriciella* (Tachinidae). Canad. Ent. Orillia **56** 1924 pp. 257–269. [Dipt.]

Toumanoff, *see* Kostritsky, Toumanoff & Metalnikow.

2217.—**Trägårdh,** I. Trägnagare-Studier. (Anobiiden-Studien.) Medd. Stat. Skogsförsöksanst. Stockholm **21** 1924 pp. 311–338 16 figs. [Col.] [German summary.]

2218.—**Trautmann,** W. *Bombus mucidus* Gerst. var. n. *dusmeti* m. Zs. wiss. Insektenbiol. Berlin **19** 1924 p. 225. [Hym.]

2219.—**Treherne,** R. C. Thysanoptera known to occur in Canada. Canad. Ent. Orillia **56** 1924 pp. 82–88 1 fig.

Treherne, R. C. *see* de Gryse & Treherne.

2220.—**Trella,** T. Verzeichnis der Käfer der Umgebung von Przemysl: Necrophaga. Polsk. Pismo ent. Lemberg **3** 1924 pp. 18–22. [Col.]

2221.—**Trimble,** F. M. The azalea leaf-miner (Lepid.: Tineidae). Ent. News Philadelphia **35** 1924 pp. 275–279 1 pl.

2222.—**Trimble,** F. M. Life history and habits of two Pacific Coast bark-beetles. Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 382–390 1 pl. [Col.]

2223.—**Trouvelot,** B. Observations sur le mode de ponte de l'*Habrobracon johannseni* (Vier.), Hyménoptère braconide parasite de la Teigne des pommes de terre. Exposition Internat. Cent. Pasteur Strasbourg Juin–Oct. 1923 Cong. Path. vég. 1923 pp. 46–48.

2224.—**Turati,** E. Il *Crambus graphellus* Const. in Italia. Mem. Soc. ent. ital. Genoa **1** 1922 pp. 8–13 1 pl. [Lep.]

2225.—**Turati,** E. Spedizione Lepidotterologica in Cirenaica, 1921–1922. Atti Soc. ital. Sci. nat. Milan **63** 1924 pp. 21–191. [Lep.]

2226.—**Turner,** A. J. Results of Dr. E. Mjöberg's Swedish Scientific Expeditions to Australia, 1910–1913. 33. Pyraloidea. Ark. Zool. Stockholm **16** no. 3 1924 pp. 1–7. [Lep.]

2227.—**Turner,** C. L. Breeding habits and mutations in the moth-like fly (*Psychoda*). Science New York **60** 1924 pp. 338–339. [Dipt.]

2228.—**Turner,** H. H. On the numerical aspect of reciprocal mimicry (Diaposematic resemblance). Trans. Ent. Soc. London **1923** 1924 pp. 667–675 9 figs. [Lep.]

2229.—**Turner,** H. J. *Coenonympha pamphilus,* L. Proc. S. London Ent. & N.H. Soc. **1923-24** pp. 39–54 1 chart. [Lep.]

2230.—**Turner,** R. L. A new mosquito from Texas (Diptera Culicidae). Insec. Insc. Menstr. Washington **12** 1924 p. 84.

2231.—**Uchida,** T. Some Japanese Ichneumonidae the hosts of which are known. J. Sapporo Soc. Agric. and Forestry **16** 1924 pp. 195–256. [In Japanese, descriptions in German.]

2232.—**Uffeln,** K. Nochmals *Tortrix viridana* L. Intern. ent. Zs. Guben **18** 1924 pp. 213–215, 217. [Lep.]

2233.—**Uhlmann,** E. Über Pluripotenz, Spezifikation und Entwicklungsbahnen im Bauinstinkt der Trichopterenlarven. Verh. D. zool. Ges. Berlin **29** 1924 pp. 99–102.

2234.—**Uhmann,** E. 1. Beitrag zur Käferfauna Deutschlands. Ent. Bl. Berlin **20** 1924 pp. 55–57. [Col.]

Uhmann, E. *see* Krancher & Uhmann.

Uhryk, F. *see* Abafi-Aigner, Pável & Uhryk.

2235.—**Uichanco,** L. B. Studies on the embryogeny and postnatal development of the Aphididae with special reference to the history of the "Symbiotic Organ" or "Mycetom." Philipp. J. Sci. Manila **24** 1924 pp. 143–247 13 pls. [Hom.]

2236.—**Ule,** C. H. Einiges über *Theria* (*Hibernia*) *rupicapraria* Schiff. Intern. ent. Zs. Guben **18** 1924 pp. 25–27. [Lep.]

2237.—**Ule,** C. H. Vierzehn für Pommern neue Grossschmetterlinge. Intern. ent. Zs. Guben **18** 1924 pp. 165–167. [Lep.]

2238.—**Ule,** C. H. *Notodonta phoebe* Sieb., über Zucht und Verbreitung in Pommern. Ent. Rdsch. Stuttgart **41** 1924 pp. 21–25. [Lep.]

2239.—**Ulmer,** G. Einige alte und neue Ephemeropteren. Konowia Vienna **3** 1924 pp. 23–37 4 figs.

2240.—**Ulmer,** G. Ephemeroptera. Eintagsfliegen. Biol. Tiere Deutschlands Berlin 1924 Teil 34 40 pp. 28 figs.

2241.—**Ulmer,** G. Ephemeropteren von den Sunda-Inseln und den Philippinen. Treubia Buitenzorg **6** 1924 pp. 28–91 58 figs.

2242.—**Ulrich,** W. Die Mundwerkzeuge der Spheciden (Hym. Foss.) Beitrag zur Kenntnis der Insektenmundwerkzeuge. Zs. Morph. Oekol. Tiere Berlin 1924 **1** pp. 539–636 113 figs.

2243.—**Urban,** C. Zur Lebensweise und Entwicklung einiger *Ceuthorrhynchus*. Ent. Bl. Berlin **20** 1924 pp. 50–55 & 81–86. [Col.]

2244.—**Urban,** C. Ueber die Larve von *Otiorrhynchus sulcatus* F. Ent. Bl. Berlin **20** 1924 pp. 175–178 1 fig. [Col.]

2245.—**Urban,** C. Aus dem Leben einiger *Tychius*. Ent. Bl. Berlin **20** 1924 pp. 182–185. [Col.]

2246.—**Uvarov,** B. P. Ueber die Acrididen-Gattungen *Helioscirtus* Sauss. und *Vosseleria*, g.n., nebst Beschreibung zweier neuen *Vosseleria*-Arten von Somali. Konowia Vienna **2** 1923 pp. 29–32. [Orth.]

2247.—**Uvarov,** B. P. A revision of the Old World Cyrtacanthacrini (Orthoptera, Acrididae).—IV. Genera *Austracris* to *Cyrtacanthacris*. Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 1–19 2 figs.

2248.—**Uvarov,** B. P. Revised lists of species of the genera *Arcyptera*, *Mecostethus*, *Parapleurus* and *Ramburiella* (Orthoptera, Acrididae). Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 242–248.

2249.—**Uvarov,** B. P. A revision of the Old World Cyrtacanthacrini (Orthoptera, Acrididae).—V. Genera *Cyrtacanthacris* to *Loiteria*. Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 96–113 2 figs.

2250.—**Uvarov,** B. P. A new genus of Pamphaginae (Orthoptera) from the Angola Coast. Ann. Mag. Nat. Hist. London (9) **14** 1924 pp. 617–619.

2251.—**Uvarov,** B. P. A new long-horned grasshopper damaging coconut palms in New Britain. Bull. Ent. Res. London **15** 1924 pp. 35–36 1 fig.

2252.—**Uvarov,** B. P. Notes on the Orthoptera in the British Museum. 3. Some less known or new genera and species of the subfamilies Tettigoniinae and Decticinae. Trans. Ent. Soc. London **1923** 1924 pp. 492–537 1 pl. 1 fig.

2253.—**Uvarov,** B. P. Some new and interesting Orthoptera in the collection of the Ministry of Agriculture, Cairo. Min. Agr. Egypt Tech. & Sci. Serv. Bull. **41** 1924 41 pp. 3 pls.

Uvarov, B. P. *see* Buxton & Uvarov.

2254.—**Uye,** T. On three Aphids in Kiushyu. Insect World Gifu **28** 1924 pp. 14–15, 92–93, 126–127. [Hom.] [In Japanese.]

2255.—**Van Duzee,** E. P. The genus *Erythroneura* in California (Homoptera). Proc. Cal. Acad. Sci. San Francisco (4) **13** 1924 pp. 231–236.

2256.—**Van Duzee,** E. P. Characters of two North American Chermidae. Pan-Pacific Ent. S. Francisco **1** 1924 pp. 22–23. [Hom.]

2257.—**Van Duzee,** M. C. The Dipterous genus *Syntormon* in North America (Dolichopodidae). Trans. Amer. Ent. Soc. Philadelphia **50** 1924 pp. 275–287 1 fig. [Dipt.]

2258.—**Van Duzee,** M. C. A new western Dolichopodid. Pan-Pacific Ent. S. Francisco **1** 1924 pp. 43–44. [Dipt.]

2259.—**Van Duzee,** M. C. North American species of *Paraphrosylus* Becker, a subgenus of *Aphrosylus* Walker. Pan-Pacific Ent. S. Francisco **1** 1924 pp. 73–78. [Dipt.]

2260.—**Van Duzee,** M. C. New Canadian Dolichopodidae (Diptera). Canad. Ent. Orillia **56** 1924 pp. 244–249.

2261.—**Van Dyke,** E. C. New species and subspecies of Cychrini (Carabidae, Coleoptera) from western North America. Pan-Pacific Ent. S. Francisco **1** 1924 pp. 1–6.

2262.—**Van Someren,** V. G. L. Notes on the life-history and insect-food preferences of a lichen-like Ascalaphid larva. Trans. Ent. Soc. London **1924** pp. lix–lxv. [Neur.]

2263.—**Varga,** L. A méhmajmolás haszna. Termész. Közl. Budapest **53** 1921 pp. 368–369. [Dipt., Hym.]

2264.—**Vaternahn,** T. Zur Ernährung und Verdauung unserer einheimischen *Geotrupes*-arten. Zs. wiss. Insektenbiol. Berlin **19** 1924 pp. 20–27. [Col.]

2265.—**Vayssière,** P. Trois nouveaux Coccides de l'Afrique française (Hem.). Bull. Soc. ent. France Paris **1924** pp. 28–32 3 figs.

2266.—**Veitch,** R. & **Greenwood,** W. The food-plants or hosts of some Fijian insects. Part ii. Proc. Linn. Soc. N.S.W. Sydney **49** 1924 pp. 153–161.

2267.—**Vellay,** E. Fauna Regni Hungariae: Apterygogenea. Budapest **1918** pp. 19–22.

2268.—**Verhoeff,** K. W. Zur Biologie der Lampyriden. Zs. wiss. Insektenbiol. Berlin **19** 1924 pp. 79–88, 122–126, 135–143 1 fig. [Col.]

2269.—**Verity,** R. Geographical variation in *Hipparchia semele*, L. Ent. Rec. London **36** 1924 pp. 21–26. [Lep.]

2270.—**Verity,** R. Additions and corrections to "List of Grypocera and Rhopalocera of Peninsular Italy." Ent. Rec. London **36** 1924 pp. 106–111.

2271.—**Verity,** R. & **Querci,** O. Races and seasonal polymorphism of the Grypocera and of the Rhopalocera of Peninsular Italy. Ent. Rec. London **36** 1924 sep. pp. 21–44. [Lep.]

2272.—**Vialatte,** C. Conformation et fonction des soies caudales chez les larves de quelques espèces d'anophelines. Arch. Inst. Pasteur d'Algérie **2** 1924 pp. 235–238 2 figs. 1 pl. [Dipt.]

Vichet, G. de *see* Grassé & Vichet.

2273.—**Viehmeyer,** H. Zur sächsischen Ameisenfauna. SitzBer. Isis Dresden **1915** 1916 pp. 61–64. [Hym.]

2274.—**Viehmeyer,** H. Formiciden der australischen Faunenregion. Ent. Mitt. Berlin **13** 1924 pp. 219–229 & 310–319. [Hym.]

2275.—**Viehmeyer,** H. Polymorphismus und Ernährung bei den Ameisen. Arch. Natg. Berlin Abt. A **89** (1923) 1924 Heft 12 pp. 1–12. [Hym.]

2276.—**Viereck,** H. L. Descriptions of two Canadian bees of the genus *Melecta*. Canad. Ent. Orillia **56** 1924 p. 15. [Hym.]

2277.—**Viereck,** H. L. Prodromus of *Andrena*, a genus of Bees. Canad. Ent. Orillia **56** 1924 pp. 19–24, 28–32 76–81 & 237–244. [Hym.]

2278.—Viereck, H. L. Descriptions of new reared Hymenoptera from Nova Scotia and British Columbia. Canad. Ent. Orillia **56** 1924 pp. 64–69 1 fig.

2279.—Viereck, H. L. Descriptions of new Hymenoptera in the Canadian National Collection, Ottawa. Canad. Ent. Orillia **56** 1924 pp. 110–112.

2280.—Viereck, H. L. A remarkable new Ichneumonine. Canad. Ent. Orillia **56** 1924 p. 202. [Hym.]

2281.—Viereck, H. L. Two genera of Ichneumonidae. Canad. Ent. Orillia **56** 1924 pp. 300–301 2 figs. [Hym.]

2282.—Viereck, H. L. The identity of *Conohalictoides novaeangliae* Robertson. Proc. Ent. Soc. Washington **26** 1924 pp. 14–15 1 fig. [Hym.]

2283.—Viereck, H. L. The Philippine species of *Parevaspis*, a genus of Bees. Philipp. J. Sci. Manila **24** 1924 pp. 745–746 1 fig. [Hym.]

2284.—Vignon, P. Espèces nouvelles dans les genres *Pycnopalpa, Coelophyllum* (Sauterelles Phanéroptérides) et *Rhodopteryx* (Ptérochrozées). Bull. Mus. Hist. nat. Paris **1924** pp. 301–308. [Orth.]

2285.—Vignon, P. Deuxième, troisième et quatrième Notes sur les *Pterochrozae* du Muséum National de Paris. Bull. Mus. Hist. nat. Paris **1923** pp. 435–442, 515–522 1 fig. & 570–576 1 fig. ; **1924** pp. 208–214. [Orth.]

2286.—Vignon, P. Sur le mimétisme homotypique chez quelques sauterelles Phanéroptérides de l'Amérique tropicale. C.R. Acad. Sci. Paris **178** 1924 pp. 1852–1854. [Orth.]

2287.—Villeneuve, J. Contribution à la classification des Tachinidae paléarctiques. Ann. Sci. nat. (Zool.) Paris (10) **7** 1924 pp. 5–22 7 figs. [Dipt.]

2288.—Villeneuve, J. Diptères nouveaux. Encyc. ent. Sér. B **2** Dipt. **1** Paris Lechevalier 1924 pp. 5–8.

2289.—Villeneuve, J. & Gauthier, H. Diptères rapportés du Sud-Tunisien par M. H. Gauthier (1923). Bull. Soc. Hist. nat. Afr. N. Algiers **15** 1924 pp. 67–70.

2290.—Vimmer, A. Uber die Trachealisation des Kopfes und des Nervenbauchstranges der Dipterenlarven. Ceskoslov. ent. spol. Jubilejni Sbornik Prague **1924** pp. 124–136 6 figs.

2291.—Vimmer, A. O ústním ústrojí larev evropských Blepharocerids (Dipt.). [Structure of mouth-parts in the European Blepharocerids.] Ceskoslov. ent. spol. Jubilejni Sbornik Prague **1924** pp. 136–143 3 figs.

2292.—Vimmer, A. O ústním ústrojí larev některých Brachycer (Dipt.). [On the mouth-parts of some Brachycerous larvae.] Casopis Prague **21** 1924 pp. 1–4 7 figs.

2293.—Voelkel, H. Zur Biologie und Bekämpfung des Khaprakäfers, *Trogoderma granarium* Everts. Arb. biol. Reichsanst. Land- u. Forstw. Berlin **13** 1924 pp. 129–172 3 figs. 3 pls. [Col.]

2294.—Vorbrodt, C. Untersuchungen über den Stand der schweizerischen Schmetterlingskunde 1818–1923. Schweizer ent. Anz. Zürich **3** 1924 pp. 4–7, 11–13, 17–20. [Lep.]

2295.—Vorbrodt, C. Ist *Pieris napi* L. *bryoniae* O. mehrbrütig ? Schweizer ent. Anz. Zürich **3** 1924 pp. 37–38. [Lep.]

2296.—Vorbrodt, C. Können sich Schmetterlingsraupen unterm Winterschnee weiter entwickeln ? Intern. ent. Zs. Guben **18** 1924 pp. 169–173. [Lep.]

2297.—Voss, E. Die Gattung *Euops* Schh. (Col. Curc.). (11. Beitrag zur Kenntnis der Curculioniden.) D. ent. Zs. Berlin **1924** pp. 33–64.

2298.—Voss, E. H. Sauters Formosa-Ausbeute. Curculionidae : Attelabinae. (Col.) (16. Beitrag zur Kenntnis der Curculioniden.) D. ent. Zs. Berlin **1924** pp. 278–284.

2299.—Voss, E. Einige bisher unbeschriebene Attelabiden aus dem tropischen Asien und Indomalayischen Archipel. (15. Beitrag zur Kenntnis der Curculioniden.) Ent. Bl. Berlin **20** 1924 pp. 34–46 2 figs. (Col.]

2300.—Voukassovitch, P. Contribution à l'étude de l'Eudémis (*Polychrosis botrana* Schiff.), de la Pyrale de la Vigne (*Oenophthira pilleriana*, Schiff.) et de leurs parasites. Faculté des Sciences de Toulouse **1924** 248 pp. 42 figs.

2301.—Wagner, F. Herbstfang in Süddalmatien. Eine lepidopterologischfaunistische Skizze. D. ent. Zs. Iris Dresden **37** 1923 pp. 77–82.

2302.—Wagner, H. Ein neues *Apion* aus dem baltischen Bernstein (Col. Curc.). D. ent. Zs. Berlin **1924** pp. 134–136.

Wagner, H. *see* Neresheimer & Wagner.

2303.—Wahlgren, E. Om de svenska *Heodes*-arterna. Ent. Tidsk. Stockholm **45** 1924 pp. 90–98. [Lep.] [With a German summary.]

2304.—Wahlgren, E. *Oporinia dilutata* Schiff. eller *autumnata* Bkh. ? Ent. Tidsk. Stockholm **45** 1924 pp. 110–112. [Lep.]

2305.—Wahlgren, E. Våra *Haemorrhagia-(Hemaris-)*arters nomenklatur. Ent. Tidsk. Stockholm **45** 1924 pp. 113–116. [Lep.] [With a German summary.]

2306.—Walker, E. M. The Odonata of the Thunder Bay District, Ontario. Canad. Ent. Orillia **56** 1924 pp. 170–176, 182–189.

2307.—Walker, J. J. Oxford butterflies in the season of 1924. Ent. Mo. Mag. London **60** 1924 pp. 247–249.

2308.—Wallis, J. B. Two new species of *Coelambus* (Dytiscidae, Coleoptera). Canad. Ent. Orillia **56** 1924 pp. 105–108 2 figs.

2309.—Walsh, G. B. The passage of apterous insect parasites, etc., from host to host. Ent. Mo. Mag. London **60** 1924 pp.143–148.

2310.—Walsh, G. B. New Yorkshire records of Hemiptera. Naturalist London 1924 pp. 219–223.

2311.—Wardle, R. A. & Buckle, P. The principles of insect control. University Press, Manchester, & Longmans Green & Co. London 1923 295 pp. 1 pl. 32 figs.

2312.—Warnecke, G. Vorlaüfige Mitteilung über die Hamburger *Agrotis subrosea* Stph. und Beschreibung einer neuen Form. Intern. ent. Zs. Guben **18** 1924 pp. 181–182. [Lep.]

2313.—Warnecke, G. Doerriesia. (Bemerkungen über ostasiatische und sibirische Grossschmetterlinge.) D. ent. Zs. Iris Dresden **38** 1924 pp. 149–158 1 pl. [Lep.]

2314.—Warnecke, G. Einige Bemerkungen über *Gonepteryx aspasia* Mén. und *acuminata* Felder. Mitt. münchn. ent. Ges. **14** 1924 pp. 70–72. [Lep.]

2315.—Warnecke, G. Ueber zwei nigristische Formen von *Argynnis paphia* L. aus Baden. Mitt. badischen ent. Ver. Freiburg i. Br. **1** 1924 pp. 82–87 1 fig. [Lep.]

2316.—Warren, D. C. Inheritance of egg size in *Drosophila melanogaster*. Genetics Brooklyn **9** 1924 pp. 41–69 14 figs. [Dipt.]

2317.—Waters, E. G. R. Tineina in the Oxford District. Ent. Mo. Mag. London **60** 1924 pp. 98–103. [Lep.]

2318.—Waterston, J. On the Mallophaga of the Spitsbergen Expedition, 1923. Trans. Ent. Soc. London **1924** p. 151.

2319.—Waterston, J. A new Chalcid attacking bamboo in India (Hymenoptera). Bull. Ent. Res. London **15** 1924 pp. 69–71 2 figs.

2320.—Watkins, H. T. G. New *Argynnis* races and notes. Ann. Mag. Nat. Hist. London (9) **13** 1924 pp. 454–460. [Lep.]

2321.—Watson, J. R. A new *Bregmatothrips* (Thysanoptera) from England and Holland. Ent. Mo. Mag. London **60** 1924 pp. 253–254.

2322.—Watson, J. R. & Hubbell, T. H. On a collection of Thysanoptera from Honduras. Florida Ent. Gainesville **7** 1924 pp. 60–62.

2323.—Watt, M. N. The leaf-mining insects of New Zealand: Parts 4 & 5. Trans. N.Z. Inst. Wellington **55** 1924 pp. 327–340 7 pls. & 674–687 2 pls. 24 figs.

2324.—Webb, J. L. & Wells, R. W. Horse-flies: biology and relation to western agriculture. U. S. Dept. Agric. Washington Dept. Bull. **1218** 1924 35 pp. 18 figs. [Dipt.]

Webber, R. T. *see* Aldrich & Webber.

2325.—Weber, M. Das Grundschema des Pterygotenthorax. Zool. Anz. Leipzig **60** 1924 pp. 17–37 57–82 5 figs.

2326.—Weber, P. Die Schmetterlinge des Tössstockschongebietes (2. Nachtrag). Schweizer ent. Anz. Zürich **3** 1924 pp.29–30. [Lep.]

2327.—Wehrle, L. P. A study of the segmentation of the antennae of the clover-flower midge (*Dasyneura leguminicola* Lintner). Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 416–418. [Dipt.]

2328.—Wehrli, E. Demonstration neuer schweizerischer Lepidopteren-Formen. Mit. schweiz. ent. Ges. Bern **13** 1924 pp. 344–345.

2329.—Wehrli, E. Neue paläarktische Geometriden-Arten und Formen aus Ostchina. (Sammlung Höne.). D. ent. Zs. Iris Dresden **37** 1923 pp. 61–75 1 pl. [Lep.]

2330.—Wehrli, E. Nice–St. Martin Vésubie-Digne. Ein Beitrag zur Lepidopterenfauna der Alpes Maritimes und der Basses Alpes. D. ent. Zs. Iris Dresden **38** 1924 pp. 50–57 59–98 1 pl.

2331.—Wehrli, E. Neue und wenig bekannte paläarktische und Sudchinesische Geometriden-Arten und Formen. (Sammlung Höne.) ii. Teil. Mitt. münchn. ent. Ges. **14** 1924 pp. 130–142 1 fig. [Lep.]

2332.—Wehrmeister, H. Beiträge zur Kenntnis der Cecidomyidenlarven mit besonderer Berücksichtigung des Darmes. Zool. Jahrb. Jena Abt. System. **49** 1924 pp. 299–334 1 pl. 1 fig. [Dipt.]

2333.—Weise, J. Ueber einige Hispinen aus Sumatra. Tijdschr. Ent. The Hague **67** 1924 Supplement pp. 78–83. [Col.]

2334.—Weise, J. *Colaspoides javana* n. sp. (Col. Chrysom.). Treubia Buitenzorg **5** 1924 p. 235.

2335.—Weise, J. Zoological Results of the Swedish Expedition to Central Africa, 1921. Insecta. 7. Chrysomelidae und Coccinellidae. Ark. Zool. Stockholm **16** 1924 no. 22 pp. 1–30.

2336.—Weiss, H. B. The colours of bugs. J. New York Ent. Soc. **32** 1924 p. 163. [Hem.]

2337.—Weiss, H. B. Insect food habits and vegetation. Ohio J. Sci. Columbus **24** 1924 pp. 100–106.

2338.—Weiss, H. B. Edgar Leek Dickerson. Ent. News Philadelphia **35** 1924 pp. 35–38.

2339.—Weiss, H. B., & **Lott,** R. B. Notes on *Piesma cinerea* Say in New Jersey (Hemiptera). Psyche Boston **31** 1924 pp. 233–235.

2340.—Weiss, H. B. and **West,** E. The insects and plants of a salt marsh on the coastal plain of New Jersey. J, New York Ent. Soc. **32** 1924 pp. 93-104 3 figs.

2341.—Weiss, H. B. & **West,** E. Notes on the False Indigo Lace Bug, *Gelchossa heidemanni* Osborn & Drake, in New Jersey (Hemip. : Tingitidae). Ent. News Philadelphia **35** 1924 pp. 56–60.

2342.—Weiss, H. B. & **West,** E. Notes on the Judas Tree Leafhopper, *Erythroneura aclys*, McAtee, in New Jersey (Homop.). Ent. News Philadelphia **35** 1924 pp. 129–132.

Weiss, H. B. *see* Mutchler & Weiss.

2343.—Weissberg, S. Sur quelques espèces européennes du genre *Dyschirus* Bonelli (Note préliminaire). Ann. zool. Mus. polon. Hist. nat. Warsaw **2** 1924 pp. 46–48. [Col.]

2344.—Welch, P. S. Observations on the early larval activities of *Nymphula maculalis* Clemens (Lepidoptera). Ann. Ent. Soc. Amer. Columbus **17** 1924 pp. 395–402.

2345.—Wells, B. W. Early stages in the development of certain *Pachypsylla* galls on *Celtis*. Amer. J. Bot. **9** 1920 pp. 275–285 1 plate. [Hom.] [Not seen.]

Wells, R. W. *see* Webb & Wells.

2346.—Wendeler, H. Neue Staphyliniden (Col.) (4. Beitrag zur Kenntnis der Staphyliniden.). D. ent. Zs. Berlin **1924** pp. 340–344.

2347.—Wendeler, H. Bemerkungen über Staphyliniden (Col.). (5. Beitrag zur Kenntnis der Staphyliniden.). D. ent. Zs. Berlin **1924** p. 344.

2348.—Werner, F. Dritter Beitrag zur Kenntnis der Mantodeen von Niederländisch-Indien. Treubia Buitenzorg **5** 1924 pp. 259–266. [Orth.]

West, E. *see* Weiss & West.

2349.—West, L. S. New North-eastern Dexiinae (Diptera : Tachinidae). Psyche Boston **31** 1924 pp. 184–192.

2350.—Wheeler, G. C. & **Wheeler,** E. H. A new species of *Schizaspidia* (Eucharidae) with notes on a Eulophid ant parasite. Psyche Boston **31** 1924 pp. 49–56 2 figs. [Hym.]

2351.—**Wheeler,** G. C. & E. H. The use of a tool by a Sphecid wasp. Science New York **59** 1924 p. 486.

2352.—**Wheeler,** W. M. Report on the ants collected by the Barbados-Antigua Expedition from the University of Iowa in 1918. Univ. Iowa Studies Nat. Hist. **10** no. 3 1923 pp. 3–9. [Hym.]

2353.—**Wheeler,** W. M. A gynandromorph of *Tetramorium guineense* Fabr. Psyche Boston **31** 1924 pp. 136–137 1 fig. [Hym.]

2354.—**Wheeler,** W. M. On the ant genus *Chrysapace* Crawley. Psyche Boston **31** 1924 pp. 224–225. [Hym.]

2355.—**Wheeler,** W. M. Two extraordinary larval myrmecophiles from Panama. Proc. Nat. Acad. Sci. Washington **10** 1924 pp. 237–244 3 figs. [Dipt.]

2356.—**Wheeler,** W. M. The Formicidae of the Harrison Williams Galapagos Expedition. Zoologica New York **5** 1924 pp. 101–122 9 figs. [Hym.]

2357.—**Wheeler,** W. M. Hymenoptera of the Siju Cave, Garo Hills, Assam. I. *Triglyphothrix striatidens* Emery as a cave ant. Rec. Ind. Mus. Calcutta **26** 1924 pp. 123–124.

2358.—**Wheeler,** W. M. Ants of Krakatau and other islands in the Sunda Strait. Treubia Buitenzorg **5** 1924 pp. 239–258 1 map. [Hym.]

Whitcomb, W. D. *see* Newcomer & Whitcomb.

2359.—**Whiting,** P. W. A study of hereditary and environmental factors determining a variable character. Defective and freak venation in the parasitic wasp *Habrobracon juglandis* Ashm. Univ. Iowa Studies in Child Welfare **3** no. 1 1924 80 pp. [Hym.]

2360.—**Wichmann,** H. E. Ueber die geographische Verbreitung der Ipiden (Col.) (1. Das Material von Dr. Fahringer, Wien.) Zool. Anz. Leipzig **61** 1924 pp. 14–18.

2361.—**Wigglesworth,** V. B. Uric acid in the Pieridae: A quantitive study. Proc. R. Soc. London Ser. B. **97** 1924 pp. 149–155. [Lep.]

2362.—**Wild,** O. H. Observations on the Humble-bees of Bute. Scot. Nat. Edinburgh **1924** pp. 53–60 1 fig. [Hym.]

2363.—**Wileman,** A. E. Notes on Japanese Lepidoptera and their larvae: Part vii. Philipp. J. Sci. Manila **25** 1924 pp. 75–109 2 pls.

2364.—**Wiley,** G. O. On the biology of *Curicta drakei* Hungerford (Heteroptera, Nepidae). Ent. News Philadelphia **35** 1924 pp. 324–331 1 pl.

2365.—**Wilke,** S. Die graue Gerstenminierfliege, *Hydrellia griseola* Fall. (Dipt. Ephydr.) D. ent. Zs. Berlin **1924** pp. 172–179.

2366.—**Wilke,** S. Ueber Lebensdauer und Fortpflanzung des Getreidelaufkäfers, *Zabrus tenebrioïdes* Goeze. Zs. wiss. Insektenbiol. Berlin **19** 1924 pp. 257–261. [Col.]

2367.—**Willaume,** F. Observations biologiques sur la nymphose de *Agriotes obscurus,* L. Rev. Path. vég. & Ent. agric. Paris **11** 1924 pp. 85–92 3 figs. [Col.]

2368.—**Willaume,** F. Technique élémentaire des élevages d'Insectes. Rev. Hist. nat. app. Paris Ire Partie **5** 1924 pp. 44–64 & 87–96 15 figs.

2369.—**Wille,** J. Ein neues Tibialorgan der Orthoptere *Rhipipteryx chopardi* Willemse. Zool. Anz. Leipzig **58** 1924 pp. 243–253 3 figs.

2370.—**Wille,** J. Die verschiedenen Bewegungs-arten des *Rhipipteryx chopardi* (Willemse) (Orthoptera). Zool. Anz. Leipzig **61** 1924 pp. 49–72 11 figs.

2371.—**Willemse,** C. Zwei neue *Caryanda*-Arten. (Orthop. Subfam. Acridiodea, trib. Cyrtacanthacrinae). Tijdschr. Ent. The Hague **67** 1924 pp. 156–159 1 fig.

2372.—**Williams,** B. S. Coleoptera collected in the Harpenden District during 1921, 1922, 1923. Ent. Mo. Mag. London **60** 1924 pp. 76–80.

Williams, R. C., Jr. *see* Skinner & Williams.

2373.—**Williamson,** E. B. & **Williamson,** J. H. A remarkable new genus of Coenagrionidae from Brazil, with descriptions of three new species (Odonata). Occas. Pprs. Mus. Zool. Univ. Mich. Ann Arbor no. **154** 1924 24 pp. 1 pl.

2374.—**Williamson,** E. B. & **Williamson,** J. H. The genus *Perilestes* (Odonata). Univ. Mich. Mus. Zool. Ann Arbor, Misc. Pubns. no. **14** 1924 38 pp. 1 pl.

Williamson, J. H. *see* Williamson, E. B.

2375.—**Wilson,** I. T. Two new hereditary tumors in *Drosophila melanogaster*. Genetics Brooklyn **9** 1924 pp. 343–362 16 figs. [Dipt.]

2376.—**Wimshurst,** F. M. A new British Aphid. Ent. Mo. Mag. London **60** 1924 pp. 62–63 4 figs. [Hom.]

2377.—**Winge,** Ö. Zur Frage der Letalfaktoren. Zs. indukt. Abstammgslehre Leipzig **35** 1924 pp. 279–285. [Dipt.]

2378.—**Winkler,** A. Catalogus Coleopterorum regionis palaearcticae, Pars 1 & 2. Vienna 1924 pp. 1–240.

2379.—**Winn-Sampson,** F. A new species of Platypodidae from Pretoria, South Africa. Ann. Mag. Nat. Hist. London (9) **14** 1924 p. 545. [Col.]

2380.—**Winn-Sampson,** [F.]. Platypodidae of the Belgian Congo. Rev. zool. afr. Brussels **12** 1924 pp. 123–133. [Col.]

2381.—**Withycombe,** C. L. Further notes on the biology of some British Neuroptera. Entomologist London **57** 1924 pp. 145–152 2 figs.

2382.—**Withycombe,** C. L. Note on the economic value of the Neuroptera with special reference to the Coniopterygidae. Ann. App. Biol. Cambridge **11** 1924 pp. 112–124 1 pl.

2383.—**Withycombe,** C. L. On two new species of Coniopterygidae (Neuroptera) from Egypt. Bull. Soc. R. ent. Egypte Cairo **1923** 1924 pp. 140–151 9 figs.

2384.—**Wittstadt,** —. Eine neue Form von *apollo* ab. *novarae*. Soc. ent. Stuttgart **39** 1924 p. 15 1 fig. [Lep.]

2385.—**Wladasch,** E. Zwei sehr auffallend gefärbte und gezeichnete Falter von *Celerio euphorbiae* ♂ L. (Lep., Sphing.). Neue Beitr. syst. Insektenk. Berlin **3** 1924 pp. 29–30.

2386.—**Wolcott,** G. N. Insectae Portoricensis. A preliminary annotated check-list of the Insects of Porto Rico, with descriptions of some new species. J. Dept. Agric. Porto Rico Rio Piedras P.R. **7** no. 1 1924 313 pp. 2 pls.

2387.—**Wolf,** J. Contribution à la morphologie des bactéroïdes des Blattes (*Periplaneta orientalis* L.). C.R. Soc. Biol. Paris **91** 1924 pp. 1180–1182. [Orth.]

2388.—**Wolf,** J. Contribution à la localisation des bactéroïdes dans les corps adipeux des Blattes. C.R. Soc. Biol. Paris **91** 1924 pp. 1182–1183. [Orth.]

2389.—**Wolff,** M. Ueber einige praktischwichtige Borkenkäferprobleme. Ent. Bl. Berlin **20** 1924 pp. 166–170. [Col.]

2390.—**Wolfrum,** P. II. Beitrag zur Kenntnis der Anthribiden. (Col.) Ent. Mitt. Berlin **13** 1924 pp. 35–40.

2391.—**Womersley,** H. The modern study of Entomology. The Apterygota of the South-west of England. Ann. Rept. Proc. Bristol Nat. Soc. (4) **6** (1923) 1924 pp. 28–37.

2392.—**Wood,** W. C. *Polyommatus filenus* Poey (Lepid.: Lycaenidae). Ent. News Philadelphia **35** 1924 pp. 359–361.

2393.—**Woodruff,** L. B. Critical observations in the Membracid genus *Cyrtolobus* Goding. (Hemip-Homop.). J. New York Ent. Soc. **32** 1924 pp. 1–62 5 pls.

2394.—**Woodward,** G. C. Entomological notes for the season 1923. Ent. Rec. London **36** 1924 pp. 4–6 & 20.

2395.—**Worthley,** H. N. The biology of *Trichopoda pennipes* Fab. (Diptera, Tachinidae). A parasite of the common squash bug. Psyche Boston **31** 1924 pp. 7–16, 57–77 4 pls.

2396.—**Wright,** W. R. The mosquitoes of North Wales. Ent. Mo. Mag. London **60** 1924 pp. 208–210. [Dipt.]

2397.—**Wright,** W. R. On the function of the oesophageal diverticula in the adult female mosquito. Ann. Trop. Med. & Parasit. Liverpool **18** 1924 pp. 77–82 3 tables. [Dipt.]

2398.—**Wright,** W. R. Notes on some mosquito larvae from North Wales. Ann. Trop. Med. & Parasit. Liverpool **18** 1924 pp. 83–85 1 fig. 2 tables. [Dipt.]

2399.—Wright, W. R. On the hibernation of adult mosquitos. Ann. Trop. Med. & Parasit. Liverpool **18** 1924 pp. 619–627. [Dipt.]

2400.—Wright, W. S. Lepidoptera Geometridae: Notes and descriptions. Ent. News Philadelphia **35** 1924 pp. 91–96.

2401.—Wülker, G. Parasitische Würmer bei Insekten. Intern. ent. Zs. Guben **17** 1924 pp. 138–144, 147–150.

2402.—Wüsthoff, W. Uber das Präparieren kleiner Käfer. Ent. Anz. Vienna **4** 1924 pp. 29–32, 42–44, 56–57, 64, 152–153, 158–160. [Col.]

2404.—Wynne, J. F. G. Pyralides of Lancashire and Cheshire. Lancs. Ches. Nat. **16** 1924 pp. 224–228, 282–283. [Lep.]

2405.—Yagi, S. On the classification of the wild silk-producing insects in Japan. I. Rept. Alumni Assoc. Ueda Sericultural Coll. **11** 1924 pp. 1–24. [Lep.] [Not seen.]

2406.—Zachvatkin, A. Eine neue Jassiden-Gattung aus Transkaspien. (Homopt.) Ent. Mitt. Berlin **13** 1924 pp. 127–130 1 fig.

2407.—Zanon, V. Contributo alla conoscenza della fauna entomologica di Bengasi. Coleotteri. Mem. Soc. ent. ital. Genoa **1** 1922 pp. 112–139.

2408.—Zanon, V. L'apparato boccale della *Epicometis squalida* Scop., Coleottero dannoso agli ortaggi a Bengasi. Atti pont. Accad. nuovi Lincei Rome **77** 1924 pp. 46–52 4 figs.

2409.—Zanon, V. Nuova specie di *Franklinothrips* (Thysanoptera) rinvenuta a Bengasi. Atti pont. Accad. nuovi Lincei Rome **77** 1924 pp. 88–96 3 figs.

2410.—Zavattari, E. Ricerche morfologiche ed etologiche sullo psicodide *Telmatoscopus meridionalis* Eaton. Redia Florence **15** 1924 pp. 191–235 1 pl. [Dipt.]

2411.—Zawarzin, A. Ueber die histologische Beschaffenheit des unpaaren ventralen Nervs der Insekten. (Histologische Studien über Insekten V.) Zs. wiss. Zool. Leipzig **122** 1924 pp. 97–115 5 figs.

2412.—Zawarzin, A. Zur Morphologie der Nervenzentren. Das Bauchmark der Insekten. Ein Beitrag zur vergleichenden Histologie. (Histologische Studien über Insekten VI.) Zs. wiss. Zool. Leipzig **122** 1924 pp. 323–424 8 figs.

2413.—Zhelochovtsev, A. Ueber Blattwespen aus Turkestan. Ent. Mitt. Berlin **13** 1924 pp. 95–96 1 fig. [Hym.]

2414.—Zimmermann, A. Neue Dytisciden aus dem malayischen Archipel (Col.). Ent. Mitt. Berlin **13** 1924 pp. 193–195.

2415.—Zimmermann, A. Die Haliplidea der Welt. Bestimmungstabellen der Haliplidae mit gleichzeitig beigefügten Detailbeschreibungen der einzelnen Arten. Ent. Bl. Berlin **20** 1924 pp. 1–16, 65–80, 129–144 & 193–213. [Col.]

2416.—Zimmermann, A. Revision der Colymbetinen-Gattung *Lancetes* Sharp (Col.). Wiener ent. Ztg. Vienna **41** 1924 pp. 89–99.

2417.—Zimmermann, A. Wissenschaftliche Ergebnisse der schwedischen entomologischen Reise des Herrn. Dr. A. Roman in Amazonas 1914–1915. 9. Dytiscidae und Gyrinidae. Ark. Zool. Stockholm **16** no. 4 1924 pp. 1–3. [Col.]

2418.—Zimmermann, A. New Dytiscidae. Philipp. J. Sci. Manila **24** 1924 pp. 743–744. [Col.]

2419.—Zolk, K. *Paracodrus apterogynus* Halid. als neuer Parasit der *Agriotes obscurus*-Larven. Tartu Ülikooli Ent.-katsejaama teadaanded Dorpat no. **3** 1924 10 pp. 6 figs. [Hym.]

2420.—Zolk, K. Einiges neue aus der Biologie von *Agriotes obscurus* L. Tartu Ülikooli Ent.-katsejaama teadaanded Dorpat no. **4** 1924 12 pp. 4 figs. [Col.]

2421.—Zolk, K. Zur Biologie von *Paracodrus apterogynus* Halid. Tartu Ülikooli Ent.-katsejaama teadaanded Dorpat no. **5** 1924 10 pp. 6 figs. [Hym.]

2422.—Zukowsky, B. *Xylocampa areola.* Intern. ent. Zs. Guben **17** 1924 pp. 201–202. [Lep.]

2423.—Zürcher, L. Beobachtungen über *Chloropisca notata* Meig. Schweizer ent. Anz. Zürich **3** 1924 pp. 25–28. [Dipt.]

II.—SUBJECT INDEX.

N.B.—*The full reference may be obtained from "Titles" by means of the Author's name and number.*

General.

Treatises, General Works.

Berlese, Manual of Agricultural Entomology, **189**; Carpenter, Insects, their structure and life; a primer of Entomology, **372**; Cecconi, Manual of Forest Entomology, **396**; Schröder, Handbook of Entomology, **1959**; Séguy, Insect Parasites of man and domestic animals, **1985**; Wardle & Buckle, Principles of Insect Control, **2311**.

Historical.

Hauder, History of Lepidopterology in Upper Austria, **973**.

Bibliography.

Baker, second addition to Philippine and Malayan technical bibliography, **99**; Bogdanov-Katkov, Russian applied entomology, **246**; Cresson & Rehn, general entomology, **505**; Hetschko, list of works by Edmund Reitter, 2nd suppl., **1032**; Illingworth, Hawaiian Entomology, **1100**; Morstatt, Agricultural Entomology for 1923, **1550**; Stichel, literature on Hemiptera in C. Europe for 1917-18, **2114**.

Technique, Methods.

Barthe, collecting, rearing and preservation, **144**; Ferris, study of minute insects, **783**; Heikertinger, methods of procuring food-plants, **992**; Heinzel, Noctuidae, bait collecting, **1003**; Isaac, methods of rearing Tabanid larvae, **1109**; Katsumata, on preparation of Coccid specimens, **1174**; Kirk, method of injecting tracheae of insects, **1205**; Koch, collecting and preserving insects, **1230**; Kuhl, method of cutting sections without first softening the chitin, **1272**; Lehmann, method of injection to display tracheal system, **1332**; MacGregor, special apparatus and technique for study of mosquitos and other aquatic insects, **1414**; Marshall, photography of insects, **1457**; Mosher & Holbrook, inflating larvae, **1561**; Nath, method of studying mosquito ovaries, **1592**; Navás, preservation of insects, **1603**; Needham, aquatic insects, **1608**; Pawlowsky, collecting, **1691**; Peyerimhoff, collecting, **1716**; Seydel, protecting collections, **2003**; Smith, experiments with light for Lepidoptera, **2049**; Stauder, collecting Lepidoptera, **2091**; Tichomirov, colouration of tracheal system, **2186**; Torre Bueno, carbon tetrachloride, **2211**; Willaume, rearing insects, **2368**; Wüsthoff, preparation of small beetles, **2402, 2403**.

Nomenclature.

Barnes & Benjamin, on the retention of *ii* or *i* in specific patronymic names, **135**; Bather, meaning of terms "binary" and "binominal" applied to biological nomenclature, **147**; Dover, terminology of homotypes of insects, **609**; Hay, status of privately issued papers on systematic zoology, **981**; Heikertinger, principle of continuity, **993**, reply to Karny (1923), **997**, method of naming varieties, **999**; Schweppenburg, remarks on the term "subspecies," **1980**; Seitz, **1994**; Sheljuzhko, on naming aberrations, **2021**.

Classification.

Alpatov, classification of varieties of ants, **57**; Curran, taxonomy in Diptera, **518, 534**; van Emden, classification of insect larvae, especially Carabidae, **712**.

Miscellaneous.

Brain, adaptation of radio to insect investigation, **282**; Heikertinger, how to construct a systematic key, **995**; Permentier, artificial colouration of Lepidoptera, **1708**; Seitz, transport and entomology, **1991**.

Morphology.

General Anatomy.

Bodenheimer, *Tipula oleracea* (Dipt.), **241**; Cockerell, bees, **484**; Dyar & Shannon, Thaumalidae (Dipt.) **672**; Korschelt, *Dytiscus marginalis* (Col.), **1249**; Roubaud, *Anacamptomyia* and *Roubaudia* (Dipt.), **1884**.

Head.

PRELL, larva of *Thaumetopoea* (Lep.), **1781**.

Eyes.

ALVERDES, eye-structure and behaviour, **60**; EGGERS, stalked eyes in Diopsidae (Dipt.), **698**; HOMANN, insect eyes under vertical illumination, **1054**; KRAFKA, development of compound eye of *Drosophila melanogaster* and bar-eyed mutant, **1255**.

Antennae.

PRZIBRAM, functions of, in Coleoptera, **1803**; WEHRLE, segmentation of antennae of *Dasyneura leguminicola* (Cecidomyiid), **2327**.

Mouth-parts.

CRAMPTON, mandibles of certain holometabolous insects, **497**; EIDMANN, praemaxillaries, **707**; HOKE, Plecoptera, **1051**; LEON, *Culicoides pulicaris* (Dipt.), **1347**, *Cimex lectularius*, **1348**; MACGILLIVRAY, labium of certain Holometabola, **1413**; NITZULESCO, *Culex pipiens*, **1625**; REICHENSPERGER, *Psalidister* and *Cheilister* (Histeridae), **1828**; SHANNON, maxillary teeth of *Anopheles*, **2008**; ULRICH, Sphegidae, **2242**; VIMMER, Blepharoceridae (Dipt.), **2291**, Diptera Brachycera, **2292**.

Thorax.

FREEBORN, proepimera of Culicidae, **830**; MARTYNOV, morphology of thorax of insects, **1464**; WEBER, Pterygota, **2325**.

Legs.

BAYER, articulation of femur and tibia, Coleoptera, **152**; KRAFKA, Trichoptera, **1256**; LUTZ, *Trigona* (Hym.), **1396**; PHILPOTT, tibial strigil of Lepidoptera, **1726**; SEMICHON, femoro-tibial articulation in crickets (Orth.), **1995**; SPEYER, larvae of *Dytiscus marginalis*, **2073**; WILLE, *Rhipipteryx chopardi* (Orth.), **2370**.

Wings.

ADOLPH, *Epeorus assimilis* (Ephem.), **16**; BERNET KEMPERS, Coleoptera, **190**; BRAUN, frenulum and retinaculum in Lepidoptera, **283**; FERNÁNDEZ, *Euconista oberthuri* (Lep.), **778**; FORBES, nygmata in wings of holometabolous insects, **813**, how a beetle folds its wings, **815**; LUTZ, *Trigona* (Hym.), **1396**; MARTYNOV, **1465**; MEISENHEIMER, *Biston hirtarius* and *B. pomonarius* (Lep.), **1494**; OERTEL, rudimentary wings of *Carabus*, **1644**, terminology of wing veins in Adephaga, **1645**; SEMICHON, adipose tissue in wings of *Hyponomeuta malinellus* (Lep.), **1996**; SHANNON, Diptera, **2012**; SHANNON & BROMLEY, Diptera Brachycera, **2014**; TEODORO, elytra and wings of Hemiptera, **2167**, **2168**, **2170**, **2171**; TILLYARD, evolution in Hymenoptera, **2193**; WILLE, *Rhipipteryx* (Orth.), **2370**.

Abdomen.

BAUMANN, *Thalessa leucographa* (Hym.), **150**; CHOPARD, abdominal segments of Orthoptera, **430**; JORDAN, *Nyctemera* (Lep.), **1156**.

Myology.

JABLONOWSKI, Diptera, **1118**; JANISCH, *Bombus terrestris*, **1126**; MERCIER, *Lipoptena cervi*, atrophy of flight muscles, **1509**, *Geomyza sabulosa*, **1511**; SPEYER, leg muscles of larvae of *Dytiscus marginalis*, **2073**.

Alimentary System.

BUGNION, infrabuccal sac and pharynx, ants, **332**; EIDMANN, gizzard of *Periplaneta orientalis*, **708**; ENGEL, rectal papillae, **731**; ISHIMORI, distribution of malpighian vessels in wall of rectum of Lepidopterous larvae, **1114**; KÖNNEMANN, intestines of Limnobiid larvae (Dipt.), **1242**; KORSCHELT, *Dytiscus marginalis*, **1249**; LENGERKEN, extra-intestinal digestive organ, **1340**; STAMMER, Tabanid larvae, **2087**; WEHRMEISTER, intestines of Cecidomyiid larvae, **2332**.

Respiratory System.

DU BUISSON, Insecta, **336**; CARPENTIER, double stigmata in Orthopt., **375**; KEILIN, appearance of gas in tracheae of insects shortly after hatching, **1178**, primitive position of stigmata, **1179**; KIRK, method of injecting the tracheae of insects, **1205**; KORSCHELT, *Dytiscus marginalis*, **1249**; LEHMANN, method of injecting tracheae, **1332**; STADLER, gills, *Lasiocephala basalis* (Trich.), **2080**; STAMMER, Tabanid larvae, **2087**; TICHOMIROV, method of colouring tracheae, **2186**; TONNOIR, Blepharoceridae (Dipt.), **2203**; VIMMER, Dipterous larvae, **2290**.

Nervous System.

ALVERDES, influence of artificial blinding on the structure of brain of insects, **59**; BALDUS, construction of brain of Libellulidae, **103**; BRETSCHNEIDER, brain of *Callimorpha dominula*, **293**, brain of *Lasiocampa quercus*, *Bombyx mori*, *Saturnia pavonia*, **294**; CROZIER & PILZ, effect of various drugs on the nervous system of insects, **515**; HILTON, abdominal, *Dendroides* (Col.), **1040**; KORSCHELT, *Dytiscus marginalis*, **1249**; METALNIKOV, *Galleria mellonella*, immunisation from disease controlled by 3rd thoracic ganglia, **1514**; ORLOV, Lamellicorn larvae, **1663**; ZAWARZIN, abdominal, **2411, 2412.**

Circulatory System.

KORSCHELT, *Dytiscus marginalis*, **1249**; KUHL, *Dytiscus marginalis*, **1273**; LEBRUN, *Corethra* larvae, **1316**; MUTTKOWSKI, studies on blood of insects, **1585.**

Reproductive System.

ALTSON, *Lyctus brunneus* (Col.), **58**; BRELJE, Culicidae, **288**; BRYK, doubled sphragis in butterflies, **327**; CHOLODKOVSKY, spermatheca in Lepidoptera, **427**; DAMPF, internal genitalia in Tortricidae, **550**; DOBRZHANSKY, Coccinellidae, **589**, *Drosophila*, **591**; EYER, male genitalia of primitive Lepidoptera, **756**; FRÜHAUF, Cynipidae, **848**; DE GRYSE & TREHERNE, Thysanoptera, **929**; JORDAN, *Nyctemera*, **1156**; KORSCHELT, *Dytiscus marginalis*, **1249**; LEVITT & SPETT, Chrysomelidae, **1361**; LUNA, *Drosophila melanogaster*, additional ovary, **1392**; MEISENHEIMER, *Biston hirtarius* and *B. pomonarius*, **1494**; MICHAEL, *Bombyx mori*, **1525**; NATH, female genitalia in mosquito, **1592**; PEHANI, maturing of sex organs in Phasmidae, **1699**; PHILPOTT, *Sabatinca* (Zeugl.), **1728**; PROUT & TALBOT, *Trisuloides* (Lep.), **1796**; PRUTHI, Insecta, **1799**; ROOT, male genitalia of American *Anopheles*, **1869**; SKINNER & WILLIAMS, genitalia of N. American Hesperiidae, **2044**; STÖCKHERT, Insecta, **2126.**

Sexual Dimorphism.

SAUNDERS, *Apelma* (Dipt.), **1905.**

Glands.

ENDERLEIN, gland hairs in Copeognatha, **728**; HASE, poison glands in Ichneumonids, **969**; HOFFMAN, eversible gland in a midge, **1047**; JACOBS, scent glands in bees, **1120**; KONČEK, dorsal glands of Blattidae, **1241**; LINEBURG, communication by scent glands in honey bees, **1375**; MOSELY, glands in *Hydroptila* (Trich.), **1555**; STAMMER, Tabanid larvae, **2087**; SULC, wax glands in larvae of *Hesperia comma*, **2139**; TEODORO, wax glands of *Filippia oleae*, **2169.**

Fat-body.

BUYS, adipose tissue in insects, **356**; STAMMER, Tabanid larvae, **2087.**

Scales and Hairs.

ENDERLEIN, gland hairs in Copeognatha, **728**; HEINZEL, scales in Lepidoptera, **1002**; ROOT, *Anopheles quadrimaculatus* and *punctipennis*, larval pilotaxy, **1870**; SCHMITZ, Phoridae, chaetotaxy, **1939**; SÜFFERT, butterfly scales, **2137.**

Stridulation.

ARROW, Dytiscidae, Erotylidae, Endomychidae, **78**; SNODGRASS, Cicadidae, Acrididae, Gryllidae, Tettigoniidae, **2051.**

Sense Organs.

ELTRINGHAM, tympanic organ in *Chrysiridia ripheus* (Lep.), **710**; JORDAN, abdominal organ in *Nyctemera* (Lep.), **1156**; PRZIBRAM, functions of antennae in Coleoptera, **1803**; WILLE, new tibial organ in *Rhipipteryx chopardi* (Orth.), **2369.**

Larvae.

BISCHOFF, Blepharoceridae (Dipt.), **214**; CHOPRA, Carabid, **437**; JEZHIKOV, morphological importance, **1138**; LIPINA, variation of preanal appendages in larvae of Chironomidae, **1376**; NELSON, honey bee larva, **1610**; PRUTHI, imaginal characters in laryae of *Tenebrio*, **1802**; STAMMER, skin of Tabanid larvae, **2087**; VIALATTE, formation and function of caudal tufts in Anopheline larvae, **2272.**

Eggs.

NATH, *Culex fatigans*, **1592**; SEILER, Lepidoptera, **1988.**

Physiology.

General and Miscellaneous.

Brecher, determination of pupal colour in *Pieris*, **285**, in *Vanessa*, **286**; Gerould, periodic reversal of heart-beat in pupa of *Colias*, **878**; Ishimori & Metalnikov, experimental immunity in *Galleria*, **1115**; Konček, auto-haemorrhage in *Tetrodontophora* (Thysanura), **1240**; Kostritsky, Toumanoff, Metalnikow, experimental inoculation of larvae of *Galleria* with *Bacterium tumifaciens*, **1252**; Tian & Cotie, *Musca domestica*, **2185**.

Respiration.

du Buisson, *Stenobothrus* (Orth.) etc., **336**; Lee, grasshoppers and cock-roaches, **1327**; Potonie, biological significance of respiration and temperature, **1770**.

Digestion.

Könnemann, Limnobiid larvae (Dipt.), **1242**; Pictet, effect of ethyl alcohol on digestion of Lepidoptera, **1750**; Ten Cate, *Dytiscus marginalis*, **2166**; Vaternahn, *Geotrupes* (Col.), **2264**; Wehrmeister, Cecidomyiid larvae, **2332**.

Reproduction.

Glaser, effect of food on reproduction in Muscid flies, **893**; Kopec, influence of starvation of adult insects on reproduction, **1245**; Scherbinovski, effect of larval starvation on sexual productivity of adult, **2017**.

Functions, Various.

Baldus, brain of Libellulidae, **103**; Bouvier, memory in insects, **278**; Damant, buoyancy chambers in larva of *Corethra*, **549**; Eidmann, gizzard of *Periplaneta*, **708**; Wright, oesophageal diverticula in female mosquito, **2397**.

Senses.

Bodine, effect of anaesthetics on Orthoptera, **245**; Frisch, perception of colour and scent in bees, **843**; Hartwell, olfactory sense in termites, **966**; Heyde, ants, **1036**; Hewer, Odonata, **1035**; Hingston, ants, **1042**; Koehler, Libellulid larvae, **1231**; Kuhn, discrimination of colours by bees, **1274**; Minnich, olfactory sense in *Pieris*, **1529**; Plath, effect of anaesthetics on memory of bees, **1760**; Röher, colour sense in Lepidoptera, **1860**; Schulze, *Habrobracon juglandis*, movements of antennae, **1971**; Seitz, sense-activity in Lepidoptera, **1993**.

Chemistry.

Ackermann, *Melolontha vulgaris* extract, **10**; Luna, *Drosophila melanogaster*, function of peroxydase in production of pigment, **1391**; Palmer & Knight, biological origin of carotin, a cause of red and yellow colours in Coleoptera, **1671**, anthocyanin and flavone-like pigments causing red colours in Hemiptera, **1672**; Pictet, action of ethyl alcohol on pigmentation, **1750**; Przibram, chemical origin of melanism, **1804**; Wigglesworth uric acid in wing pigments of Pieridae **2361**.

Vitality and Longevity.

Blunck, *Dytiscus marginalis* (Col.), **232**; Brownlee, similarity of age vitality in invertebrates and man, **303**; Glaser, effect of food on longevity in Muscid flies, **893**; Janisch, artificial "ageing" of grain pests with CO_2, **1125, 1127**; Kopec, influence of starvation on duration of life, **1244, 1246**; Pearl, longevity and starvation, *Drosophila*, **1695**; Pearl & Parker, vitality, *Drosophila*, **1696**; Shapley, effect of temperature on speed in ants, **2016**.

Transplantation of Heads.

Blunck & Speyer, **233, 234**; Lehmann, **1331**; Lengerken, **1338**.

Development.

General.

Bodenheimer, effect of temperature on development, **243**; Petkoff, mechanism of wing expansion in Lepidoptera, **1714**; Pictet, action of ethyl alcohol on development, **1750**.

Spermatogenesis.

Bowen, in Coleoptera and Aptera, **280**; Cros, production of spermatophores in Coleoptera, **513**; Schrader, *Acroschismus* (Stylop.), **1956**; Toedtmann, *Formica rufa*, **2200**.

Oogenesis.

NATH, *Culex fatigans*, **1592**; SCHRADER, *Acroschismus* (Stylop.), **1956**.

Embryology.

BOTT, Lepidoptera, **264**; FOÀ, sex determination in silkworms, **807**; HECHT, embryology of *Camponotus* (Hym.), **989**; HERTWIG, Lepidoptera eggs, **1029**; HUETTNER, maturation and fertilization in *Drosophila*, **1073**; METZ & NONIDEZ, behaviour of nucleus and chromosomes in *Lasiopogon* (Dipt.), **1517**; SCHRADER, fertilization in *Acroschismus* (Stylop.), **1956**; SEIDEL, embryonic development of sex organs in *Pyrrhocoris* (Hem.), **1987**.

Cytology.

HÉCHT, *Camponotus ligniperda* (Hym.), **989**; HELLER, histolysis in *Deilephila* (Lep.), **1006**; HERWERDEN, larvae of *Drosophila* and *Chironomus*, appearance of living cells, **1031**; KEILIN, nephrocytes in larvae and pupae of *Lonchaea chorea* (Dipt.), **1177**; PARAT & PAINLEVÉ, salivary glands, Chironomidae, **1677**, Golgi bodies, Chironomidae, **1678**; SCHRADER, *Acroschismus* (Stylop.), **1956**.

Paedogenesis.

HARRIS, *Oligarces* (Dipt.), **962**.

Parthenogenesis.

CAVAZZA, Lepidoptera, **392**; FREDERIKSE, *Tenebrio molitor* (Col.), **829**; JUCCI, *Bombyx mori*, **1164**; STÖCKHERT, *Halictus* (Hym.), **2124**.

Viviparity.

RETHFELDT, *Chrysomela varians*, **1836**.

Sex Ratios.

PEACOCK, *Pristiphora pallipes* (Hym.), **1693**; SCHRADER, *Acroschismus wheeleri* (Stylop.), **1953**.

Postembryology. Metamorphosis.

BOUVIER, American Saturniid larvae, **276**; DEWITZ, experiments on the metamorphosis of insects, **581**; EIDMANN, growth and ecdysis, **704**, **705**, **706**; ISAAC, munber of moults in Tabanid larvae, **1110**; KOPEC, influence of starvation on metamorphosis of *Lymantria dispar*, **1246**; LENGERKEN, prothetely in Coleopterous larvae, **1337**, metately, *Tenebrio molitor*, **1339**; HERING, emergence of nymph, Odonata, **1577**; PRUTHI, postembryonic development of male genitalia of *Tenebrio*, **1800**, development of ovipositor in *Tenebrio*, **1801**, imaginal characters in larva of *Tenebrio*, **1802**; UICHANCO, development of Aphidae with reference to the "symbiotic organ," **2235**; VORBRODT, possibility of continued development of caterpillars under snow, **2296**; WHITING, effect of temperature, food and heredity on development of *Habrobracon juglandis*, **2359**.

ETHOLOGY.

General and Miscellaneous.

BUCKLE, ecology of soil insects, **331**; BUXTON, insect life in deserts, **351**; HASE, web production by larvae of *Ephestia* (Lep.), **971**; HUBAULT, construction of larval cases, Trichoptera, **1071**; LANTZ, defensive attitudes of *Mantis*, **1302**; LENZ, convergence in larval cases of Chironomidae and Trichoptera, **1345**; MORSE, habitat, Acrididae, **1518**; PLATH, habits of *Bombus*, **1759**; RUDY, effects of climate on insects of Upper Rhine, **1889**; WALSH, passage of apterous insects from host to host, **2309**; WILLE, movements of *Rhipipteryx*, **2370**; WRIGHT, hibernation of adult mosquitos, **2399**.

Instincts, Tropisms.

BRUN, orientation by sight, **320**; CORTI, death-feigning instinct in *Agrotis*, **492**; DICHTL, effect of vibration on ants, **582**; DOLLEY, stimulating effects of continuous and intermittent light, **596**; FERTON, instincts of *Pompilus*, **788**; LUTZ, response to ultra-violet rays, **1396**; MAST, phototropism in *Proctacanthus* (Dipt.), **1475**; MAST & DOLLEY, *Eristalis tenax*, stimulating effect of intermittent light, **1476**; MAXWELL, *Corisa*, phototropism, **1485**; MOTAS, reflexes of beheaded *Ranatra*, **1562**; RABAUD, Hymenoptera, **1809**; UHLMANN, nesting instinct in Trichoptera larvae, **2233**.

Flight.

BELLESME, balancing mechanism of insect in flight, **165**, **166**; COOK, climatic variations affecting flight of moths, **475**; KLIGLER, flight of *Anopheles* mosquitos, **1216**; MARIÉ, flight of *Prionus* (Col.), **1450**.

Migration.

GILLOTT, *Cydimon fulgens* and *Timetes chiron* (Lep.), **889**; GRUVEL, transport of a Pierid from the Canaries to Dakar, **928**; MAY, migration of Danaid butterflies in Brazil, **1487**.

Symbiosis.

BUCHNER, symbionts of Cicadidae, **329**; HECHT, bacteria in *Camponotus ligniperda*, **989**; LESTAGE, commensalism in aquatic larvae of Chironomids, **1356**; SCHWARTZ, symbiotic fungi in Coccidae, **1978**.

Luminosity.

BLAIR, **217**; HARVEY, *Photinus pyralis*, *Photuris pennsylvanica* (Col.), **967**; MORSE, fireflies, **1549**.

Sound Production.

BAUDRIMONT, *Polyphylla*, *Prionus*, *Anoxia* (Col.), **148**; DUNCAN, spiracles as sound-producing organs, **636**; FRISCH "language" of bees, **843**.

Cavernicolous.

ANDREWES, Carabidae, Assam, **66**; BLAIR, Coleoptera, Assam, **218**; BRUNETTI, Diptera, Assam, **324**; BURESCH, Carabidae and Silphidae, Bulgaria, **341**; CAMERON, *Philonthus* (Col.), **365**; CAUDELL, Panama, **386**, *Ceuthophilus* (Orth.), New Mexico, **389**; CHINA, *Myiophanes kempi* (Hem.), **414**; CHOPARD, Orthoptera, Sumatra and Java, **432**, India, **435**; EDWARDS, Chironomid, Assam, **692**; FLEUTIAUX, Elaterid, Assam, **805**; KNIRSCH, Carabidae, Bulgaria, **1222**; LAMB, Dolichopodid, Assam, **1293**; MEYRICK, *Tinea*, Assam, **1522**; ROHWER, Braconid, Assam, **1865**; WHEELER, Formicid, Assam, **2357**.

Feeding Habits.

GILLMER, *Eupithecia*, **887**; MEISSNER, **1496**; STEPHAN, **2108**; WEISS, **2337**.

Insects and Plants and Flowers.

CARR, Diptera pollinating *Aristolochia*, **376**; HERBST, pollination of *Phrygilanthus*, **1018**; HERING, leaf-mines, **1022**; KNOLL, flower fertilisation, **1228**; LUTZ, bees and flowers, **1396**; PETCH, insect visitors of *Aristolochia*, **1710**; ROBERTSON, insects and flowers, **1850**, **1851**.

Galls.

BEQUAERT, **176**; FALCONER, **763**; KONOPACKA, **1243**; LEEUWEN & KARNY, **1330**; WELLS, **2345**.

Parasitism.

GREGOR, Tryphonini (Hym.), **919**; HABERMEHL, parasites of *Panolis flammea*, **937**; HAUPT, **976**; PHILLIPS, parasites of Ceylon bats, **1729**; ROUBAUD, parasitic Muscidae, **1884**; SPEYER, classification of forms of parasitism, **2074**.

Sex Relations.

AICHELE, *Endromis versicolora* (Lep.), **19**; BARNES, *Limnobia nubeculosa* (Dipt.), **123**; GRUHL, Diptera, **926**; KORSCHELT, *Dytiscus marginalis* (Col.), **1249**; RAU, *Telea polyphemus* (Lep.), **1820**; RICHARDS, *Micropteryx*, **1840**; SCHRADER, *Acroschismus wheeleri* (Stylop.), **1956**; SEYRIG, Ichneumonidae, **2006**.

Parental. Oviposition.

AINSLIE, nesting habits of *Chlorion elegans* (Hym.), **22**; BAER, *Ephialtes* (Hym.), **88**; BARNES, *Dicranomyia chorea*, *Limnobia nubeculosa* (Dipt.), **123**; BAUMANN, *Thalessa leucographa* (Hym.), **150**; FRÜHAUF, Cynipidae, **848**; HASE, *Lariophagus distinguendus* (Hym.), **968**; KORSCHELT, *Dytiscus marginalis* (Col.), **1249**; SAVIN, *Ageniella bombycina* (Hym.), **1907**.

Nests.

ANNANDALE, Termites, **72**; BOUVIER, American Saturniidae, **276**; BUGNION, *Oecophylla smaragdina* (Hym.), **333**; DOANE, *Reticulitermes hesperus* (Isopt.), **587**; MOTHERSOLE, *Megachile*, **1563**; SJÖSTEDT, Termite, **2035**; STADLER, wasps, **2082**; STUMPER, Termites, **2136**; WHEELER & WHEELER, *Sphex gryphus*, **2351**.

Pupal Habits.

BURROWS, Psychidae, **348**; FISCHER, Lepidoptera, **792**; KORSCHELT, *Dytiscus marginalis* (Col.), **1249**.

Cocoons.

PRELL, emergence from misformed cocoons, **1780**; PRZIBRAM, colour in cocoons of certain moths and sawflies, **1804**.

Myrmecophily.

BEURET, Lycaenidae, **196**; DONISTHORPE, **597, 598**; KLEINE, Brenthidae, **1211**; MEISSNER, *Lycaena arion*, **1495**; RANGNOW, Lycaenidae, **1815**; REICHENSPERGER, Histeridae, **1828**; REUSS, *Lycaena arion*, **1837**; SCHMITZ, *Phyllomyza* (Dipt.), **1940**; WHEELER, *Microdon* and *Nothomicrodon* (Dipt.), **2355**.

Termite-life.

JUCCI, differentiation of castes, **1165**; REICHENSPERGER, termitophilous Histeridae, **1828**; SNYDER, adaptations of Termites to social life, **2054**.

Mimicry, Protective Resemblance.

CARPENTER, *Pseudacraea eurytus* (Lep.), **371**; CLEARE, protective resemblance, **443**; GABRITSCHEVSKY, *Volucella bombylans* (Dipt.), **861**; GIACOMELLI, ocelli on wings of *Caligo* (Lep.), **882**; POULTON, Danaidae, **1772**, *Laternaria* (Hom.), **1775**, *Papilio dardanus*, **1776**; REICHENSPERGER, mimicry among Myrmecophiles, **1828**; RÖHER, colouration as complement to instinct, **1859**; VARGA, **2263**; VIGNON, *Phaneroptera* (Orth.), **2286**.

AETIOLOGY.

Evolution, Phylogeny.

ARENDSEN HEIN, selection experiments with *Tenebrio* (Col.), **73**; BERLESE, phylogeny of insects, **188**; BISCHOFF, phylogeny of Blepharoceridae (Dipt.), **214**; BODENHEIMER, *Tipula*, phylogeny, **241**; BRUES, specificity of food-plants in evolution of phytophagous insects, **308**; CRAMPTON, phylogeny and inter-relationship of Nematocerous Diptera, **498**, Insecta, **499**; PRACK, phylogeny of Lepidoptera, **1778**; REICHENSPERGER, phylogeny of myrmecophilous Histeridae (Col.), **1828**; SEITZ, phylogeny of insects, **1992**; TILLYARD, evolution of Hymenoptera from Protohymenoptera, **2193**.

Genetics.

BONNIER, *Drosophila*, **256**; CH'EN, *Drosophila*, **408**; CLAUSEN, *Drosophila*, inheritance of cinnabar eye-colour, **442**; COCKAYNE, *Abraxas grossulariata*, **450**; DOBRZHANSKY, *Drosophila* mutants, **591**; DRY, sex ratios for two Chalcids, **625**; ENRIQUES, **732**; FISCHER, **793**; GATES, **871**; GOLDSCHMIDT, melanism, **900**; HERSCH, *Drosophila*, **1027, 1028**; HYDE, *Drosophila*, **1097**; JOHANNSEN, *Drosophila*, **1139**; JUCCI, inheritance of bivoltinism in *Bombyx*, **1163**; KING, accessory chromosomes in *Orchelimum*, **1202**; KOPEĆ, influence of starvation of parents on offspring, **1247**; LÉCAILLON, colour changes in *Bombyx* and the mutation theory, **1318**; MANN, *Drosophila*, stability of genes of inbred stock, **1444**; MAVOR & SVENSON, *Drosophila*, **1484**; MEISENHEIMER, inheritance of sexual and specific characters in *Biston*, **1494**; MERCIER, *Calliphora*, inheritance of acquired malformations, **1510, 1512**; METALNIKOV, inheritance of acquired immunity, *Galleria mellonella*, **1515**; MOHR, *Drosophila*, **1534**; PAYNE, *Drosophila*, **1692**; PICTET, modifications of pigmentation caused by ethyl alcohol, **1750, 1751**; REDFIELD, maternal inheritance, *Drosophila*, **1825**; WARREN, *Drosophila*, inheritance of egg-size, **2316**; WHITING, *Habrobracon juglandis*, **2359**; WILSON, *Drosophila*, hereditary tumors, **2375**; WINGE, *Drosophila*, lethal factor, **2377**.

Variation.

ALFKEN, colour of *Andrena rutila*, **47**; ARENDSEN HEIN, tarsi and antennae of *Tenebrio* (Col.), **74**; COCKAYNE, *Agriades thetis* (Lep.), **449**; DERENNE, *Arctia caja* (Lep.), **570**; DOBRZHANSKY, *Harmonia axyridis*, **588**; GOLDSCHMIDT, *Lymantria dispar*, origin of geographical variation, **899**; HOCK, **1043**; LÉCAILLON, *Bombyx*, **1317**; MICKEL, bimodal variation in size of *Dasymutilla* (Hym.), **1526a**; PETKOFF, outline of wings of Rhopalocera, **1712**; PHILIPTSCHENKO, embryonic variation in *Isotoma cinerea*

(Apteryg.), **1725**; TURNER, *Psychoda alternata* (Dipt.), mutations, **2227**; VIEHMEYER, polymorphism in ants, **2275**.

Seasonal Dimorphism.

SUFFERT, *Araschnia levana*, determining factors in patterns, **2138**.

Melanism.

GOLDSCHMIDT, **900**; HASEBROEK, **972**; MORLEY, **1544**; PRZIBRAM, chemical origin of melanism, **1804**; SCHRÖDER, *Melanargia galatea*, **1961**.

Colour.

AICHELE, development of colour markings in *Parnassius* (Lep.), **21**; BAYLIS, causation in Lepidoptera, **153**; BRECHER, *Pieris brassicae*, determination of colour of pupa through the larval eye, **285**, pupal colour in *Vanessa*, **286**; COCKAYNE, fluorescent pigments in Lepidoptera, **448**, egg colour, *Lycia hirtaria* (Lep.), **452**; GAUBERT, circular polarisation of light reflected by insects, **872**; KNIGHT, nature of colour patterns, and effects produced by temperature & humidity (Hem.), **1221**; PALMER & KNIGHT, carotin as the cause of red and yellow colour in Coleoptera, **1671**, anthocyanin and flavone-like pigment causing red in Hemiptera, **1672**; PICTET, action of ethyl alcohol on pigmentation, **1750**; SCHWANWITSCH, wing pattern in Satyridae, Morphidae, Brassolidae, Nymphalidae, **1977**; WIGGLESWORTH, uric acid in wing pigments of Pieridae, **2361**.

Hybrids.

JOHN, *Sphinx* and *Calasymbolus*, **1142**.

Gynandromorphs, Intersexes.

CRETSCHMAR, **506**; EMELJANOFF, *Lymantria dispar*, intersexes due to temperature, **716**; GOLDSCHMIDT, correction of earlier paper, **901**; HERING, *Argynnis paphia*, **1023**; KOSMINSKY, *Stilpnotia salicis*, intersexes in temperature experiments, **1250**, also in *Lymantria*, **1251**; LOMNICKI, *Myrmica rugulosa* (Hym.), **1379**; MAVOR, gynandromorphs of *Drosophila* from X-rayed mothers, **1483**; MEISENHEIMER *Biston* (Lep.), **1494**; PEACOCK, *Pristiphora pallipes* (Hym.), **1693**; PERKINS *Amauronematus*, Ent. Mo. Mag. **60** 1924, p. 139; ROSTAND, *Carausius morosus* (Phasmidae), **1874**; STÖCKHERT, Apidae, **2126**; WHEELER, *Tetramorium guineense* (Hym.), **2353**.

Teratology.

BRECHER, *Carausius morosus* (Orth.), conditions for producing tarsus on amputated antennae, **287**; COCKAYNE, Lepidoptera, legs, **451**.

Fossil Insects.

BAGNALL, amber Thysanoptera, **92**, von Schlechtendal's work, **94**; BOLTON, Blattidae, **252**; BRADLEY, Trichoptera, **281**; COCKERELL, Ichneumonidae, **465**, Diptera, **466**; DUNBAR, Kansas Permian, **634**; HAUGHTON, Stormberg, Triassic, **975**; KLEINE, Curculionid, **1214**; PRIESNER, amber Thysanoptera, **1789**; TILLYARD, Ricaniid (Hom.), **2190**, Palaeodictyoptera, **2192**, Protohymenoptera, **2193**; WAGNER, Coleoptera, **2302**.

GEOGRAPHY OR FAUNISTIC.

In this section references are given to all species recorded from arctic and island faunas but in the other divisions reference is made only to papers dealing with monographs and revisions or giving information of faunistic value.

General.

Hymenoptera: KOHL, *Belomicrus* (Spheg.), **1233**.—*Diptera*: MALLOCH, *Anthomyia*, **1434**. — *Siphonaptera*: DALLA TORRE, World list, **546**.

Arctic.

Novaya Zemlya. *Hymenoptera*: FRIESE, *Bombus*, **841**; KIAER, *Cryptocampus* (Tenthr.), **841**; KIEFFER, *Cinctus* (Proct.), **841**; ROMAN, Ichneumonidae, **841**.—*Lepidoptera*: REBEL, **1821**.—*Diptera*: ALEXANDER, Tipulidae, **43**; KIEFFER, Chironomidae, **1194**, **1197**; LENZ & THIENEMANN, Chironomid larvae, **1348**; SACK, **1895**. — *Siphonaptera*: ROTHSCHILD, *Mioctenopsylla arctica*, **1878**.—*Mallophaga*: FERRIS, **787**.—*Plecoptera*: MORTON, **1554**.—*Collembola*: SCHÖTT, **1955**.

Spitzbergen. *Diptera*: COLLIN, **473**; EDWARDS, Nematocera, **677**.—*Mallophaga*: WATERSTON, *Colpocephalum spinulosum*, **2318**.

Jan Mayen Is. *Diptera*: COLLIN, **474**.

Greenland. *Lepidoptera*: BARNES & BENJAMIN, *Sympistis*, **127**.

Lapland. *Coleoptera*: MUNSTER, *Cicindela*, **1581**.

Insular (including **New Zealand**).

Canary Is. *Diptera*: BECKER, *Dysmachus fuscus* Macq., **156**.

Fernando Po. *Coleoptera*: ACHARD, *Lepteroscapha* (Scaphid.), **2**.—*Hymenoptera*: DUSMET, *Xylocopa* (Apidae), **639**. — *Homoptera*: SCHMIDT, *Wolfella* (Jassid.), **1933**.

Laccadive Islands. *Diptera*: BEZZI, *Aciura basimacula* sp. n. (Trypetidae), **200**.

Ladrone Is. *Diptera*: ENDERLEIN, Ortalidae, **724**.

Caroline Is. *Coleoptera*: PIC, *Copodita*, **1735**. — *Diptera*: ENDERLEIN, Ortalidae, **724**. — *Homoptera*: TAKAHASHI, Aphidae, **2152**.

Marshall Is. *Coleoptera*: PIC, *Sessinia*, **1735**.

New Britain. *Coleoptera*: KLEINE, *Acicnemis* (Curc.), **1214**; PIC, *Sessinia* (Oedem.), **1735**; WENDELER, *Leucitus* (Staph.), **2346**. — *Diptera*: ALEXANDER, Tipulidae, **42**; EDWARDS, Culicidae, **684**.

Bismarck Arch. *Diptera*: ENDERLEIN, Ortalidae, **724**.

Solomon Is. *Coleoptera*: PIC, *Sessinia* (Oedem.), **1735**. — *Lepidoptera*: JORDAN, **1154**, **1160**, Nov. Zool. **31** p. 298; MEYRICK, Tineid, **1518**.—*Diptera*: ALEXANDER, *Tanyderus solomonis* sp. n. **36**, Tipulidae, **42**; EDWARDS, Culicidae, **684**. — *Homoptera*: MUIR, Cixiidae, **1571**. — *Odonata*: CAMPION, *Teinobasis*, **367**.

Goodenough Is. *Lepidoptera*: JORDAN, *Platypthima*, **1160**.

Hawaiian Is. *Insecta*: ILLINGWORTH, early references, **1100**. —*Coleoptera*: PERKINS, *Rhyncogonus* (Curc.), **1707**. — *Hymenoptera*: CUSHMAN, Ichneumonidae, **541**; TIMBERLAKE, Chalcidoidea, **2194**, **2195**. — *Diptera*: ALEXANDER, Tipulidae, **42**. — *Siphonaptera*: EWING, **753**. — *Homoptera*: MUIR, Fulgoridae, **1565**; TIMBERLAKE, Aphidae, **2196**. — *Isoptera*: SNYDER, **2053**, **2062**.

Galapagos Is. *Coleoptera*: BRUES, Meloidae, **309**.—*Hymenoptera*: ROHWER, **1862**; WHEELER, Formicidae, **2356**.—*Lepidoptera*: BEEBE, **163**.—*Neuroptera*: BANKS, **112**.—*Diptera*: JOHNSON, **1145**.—*Homoptera*: MORRISON, Coccidae, **1546**; OSBORN, **1667**.—*Mallophaga*: EWING, **751**.—*Apterygota*: FOLSOM, **809**.

Society Is. *Coleoptera*: PIC, *Sessinia* (Oedem.), **1735**.

Austral Is. *Diptera*: ALEXANDER, Tipulidae, **42**.

Samoa Is. *Hymenoptera*: COCKERELL, Apidae, **453**.—*Lepidoptera*: MEYRICK, Tineid, **1518**.—*Diptera*: EDWARDS, Culicidae, **684**.—*Orthoptera*: UVAROV, *Austracris*, **2247**.

Tonga Is. *Hymenoptera*: COCKERELL, Apidae, **453**.—*Diptera*: EDWARDS, Culicidae, **684**.—*Orthoptera*: UVAROV, *Austracris*, **2247**.

Fiji Is. *Insecta*: VEITCH & GREENWOOD, list of food plants, **2266**.—*Coleoptera*: CHAMPION, Hylophilidae, **398**; JORDAN, Anthribidae, **1158**, **1159**.—*Lepidoptera*: MEYRICK, **1518**; POULTON, mimicry in Danaidae, **1772**.—*Neuroptera*: BANKS, *Weelius*, *Poera*, **111**.—*Diptera*: ALEXANDER, Tipulidae, **42**; EDWARDS, Culicidae, **684**, Nematocera, **679**; ENDERLEIN, Ortalidae, **724**. —*Odonata*: TILLYARD, **2191**.

New Hebrides. *Lepidoptera*: MEYRICK, **1518**.—*Diptera*: ALEXANDER, Tipulidae, **42**; EDWARDS, Culicidae, **684**.

New Caledonia. *Coleoptera*: JORDAN Anthribidae, **1158**, **1159**.—*Diptera*: EDWARDS, Culicidae, **684**.

New Zealand. *Coleoptera*: ARROW *Chlorochiton* and *Costleya* (Melolonthi-

dae), **77**.—*Hymenoptera*: FRIESE, *Prosopis chalybaea* sp. n. (Apidae), **838**.—*Lepidoptera*: HUDSON, *Persectania* sp. n. (Noct.), Ent. Mo. Mag. **60** p. 7; MEYRICK, **1523**; PHILPOTT, **1727**; WATT, leaf-miners, **2323**.—*Trichoptera*: MOSELY, Hydroptilidae, **1556**; TILLYARD, **2188**.—*Diptera*: ALEXANDER, Anisopodidae, **33**, Tipulidae, **41**, **42**; EDWARDS, Tipulidae, **675**, *Arachnocampa* (Mycet.), **678**, Culicidae, **684**; ENDERLEIN, Stratiomyiid, **723**; MALLOCH, Calliphoridae, **1439**; MILLER, Syrphidae, **1528**; TONNOIR, *Acanthoconops* (Chiron.), **2205**; WATT, Agromyzidae, **2323**.—*Hemiptera*: BERGROTH, *Xenophyes cascus*, **184**; MYERS, Cixiidae, **1586**.—*Thysanoptera*: BAGNALL, **95**.

Falkland Islands. *Coleoptera*: ZIMMERMANN, *Lancetes subseriatus*, **2416**.

Palaearctic Region.

(*a*) **Collectively.**

Coleoptera: ACHARD, Scaphidiidae, **9**; WINKLER, catalogue, Cicindelidae to Paussidae, **2378**.—*Hymenoptera*: SCHMIEDEKNECHT, *Mesolius* (Ichn.), **1936**.—*Lepidoptera*: KENNEL, Tortricidae, **1185**.—*Diptera*: BECKER, Asilinae, **156**; KRÖBER, Conopidae, Therevidae, **1268**; LINDNER, Rhagionidae, **1373**; PARENT, *Chrysotus*, **1679**; PLESKE, Stratiomyinae, **1763**; SZILADY, Tabanidae, **2150**.—*Orthoptera*: EBNER, *Psorodonotus* (Tettig.), **673**.

(*b*) **Europe**, collectively.

Coleoptera: MADER, Scymnini, **1418**.—*Diptera*: KIEFFER, *Trichotanypus*, **1193**. — *Thysanoptera*: HOULBERT, **1069**.—*Orthoptera*: HOULBERT, **1069**.

(*c*) **North Europe and Siberia.**

Insecta: DAMPF, Esthonian moors, **551**, **552**.—*Coleoptera*: MUNSTER, *Haliplus*, Norway, **1580**.—*Trichoptera*: MARTYNOV, **1468**.—*Diptera*: PETERSEN, Danish Simuliids, **1711**.—*Hemiptera*: KIRITSHENKO, Coreinae, Russia, etc., **1203**; MORDVILKO, Aphidae, Russia, etc., **1539**; OSHANIN, Cixiidae: Orgeriaria, Russia, etc., **1668**.—*Thysanoptera*: JOHN, W. Siberia, **1143**.—*Ephemeroptera*: LESTAGE, Finland, **1354**.—*Odonata*: BARTENEV, Libellulidae, Russia, etc., **143**.

(*d*) **British Isles.**

Coleoptera: GORDON, Scotland, additions to list, Scot. Nat. **1924** p. 190; WILLIAMS, Harpenden distr., list, **2372**.—*Hymenoptera*: CARE, Ichneumonidae, Lichfield district, **377**; HAINES, Dorset, **941**; PERKINS, Devon, **1705**; STELFOX, Aculeata, Ireland, **2105**; WILD, *Bombus*, Bute, **2362**.—*Lepidoptera*: FASSNIDGE, Macrolepidoptera, Hampshire, **770**; WYNNE, Pyralidae, Lancashire and Cheshire, **2404**.—*Neuroptera*: LAIDLAW, **1287**.—*Diptera*: BARNES, Tipulidae, Carnarvonshire, **125**; BRITTEN, Lancashire and Cheshire, **298**; EDWARDS, mosquitos, **683**; JERMYN, Somerset, **1137**.—*Siphonaptera*: JEFFERY, Isle of Wight, **1135**.—*Hemiptera*: HUTCHINSON, South Ebudes, **1095**.—*Orthoptera*: BARRETT, Hertfordshire, **142**.—*Apterygota*: WOMERSLEY, S.W. England, **2391**.

(*e*) **France.**

Coleoptera: CAILLOL, Provence, **360**; DEVILLE, Rhynchophora, Basin of Seine, **579**; LOUVET, Carabidae, Sub-Pyrenees, **1380**; PLANET, Longicorns, **1758**.—*Hymenoptera*: BERLAND, Fossoria, **187**.——*Lepidoptera*: DUFOUR, *Erebia*, Auvergne Mts., **633**; MANON, Bordeaux distr., supplement, **1447**.—*Diptera*: PARENT, *Tachytrechus*, **1682**.—*Orthoptera*: CHOPARD, **429**.—*Collembola*: DENIS, **568**.

(*f*) **Central and Eastern Europe.**

Insecta: PONGRÁCZ, Poland, **1766**.—*Coleoptera*: KÜNNEMANN, E. Holstein, **1275**; KUTHY, Hungary, **1276**; NERESHEIMER & WAGNER, Mark Brandenburg, **1611**; RAMBOUSEK, Bulgaria, **1812**. — *Hymenoptera*: BLEDOWSKI & KRAINSKA, Ichneumonidae of Poland (pt. 1), **231**; MOCSÁRY, Hungary, **1536**. — *Lepidoptera*: ABAFI-AIGNER, PÁVEL & UHRYK, Hungary, **1**; BURESCH, Bulgaria, **337**, **338**, **339**; BURESCH & ILTCHEFF, Bulgaria, **342**, **343**; CANDÈZE, Heterocera, Belgium, **369**; DRENOVSKI, Rhopalocera, Mt. Vitoche, Bulgaria, **619**, Lepidoptera of Rhodope Mts., **622**; HAUDER, Microlepidoptera, Upper Austria, **974**; HELLWEGER, Macrolepidoptera, N. Tirol, **1012**; ILTCHEFF, Bulgaria, **1102**, **1103**, **1104**; MALICKY, Tortricidae, Czechoslovakia, **1419**; MARKOVITCH, Bulgaria, **1451**,

1452, 1454; METSCHL & SALZL, Regensburg, **1516**; TODOROWA & PETKOFF, Bulgaria, **2199**. — *Neuroptera*: DIMITROVA, Bulgaria, Thrace and Macedonia, **583**; MOCSÁRY, Hungary, **1535**. — *Diptera*: GUNDERMANN, Syrphidae, Thuringia, **932**; PARENT, Dolichopodidae, Belgium, suppl., **1681**; PRIESNER, *Anopheles*, Upper Austria, **1784**; SPEISER, Phoridae, East Prussia, **2068**, Diptera, East Prussia, suppl., **2069**; STEIN, Tachinidae, Central Europe, **2104**; THALHAMMER, Hungary, **2174**.—*Hemiptera*: HORVÁTH, Hungary, **1065**; LEMAIRE, Heteroptera, Belgium, **1336**. — *Anoplura*; KOHAUT, Hungary, **1232**. — *Mallophaga*: KOHAUT, Hungary, **1232**.— *Thysanoptera*: JABLONOWSKI, Hungary, **1117**; PRIESNER, Upper Austria, **1783**. —*Odonata*: MOCSÁRY, Hungary, **1534**. —*Orthoptera*: PUNGUR, Hungary, **1807**. —*Apterygota*: VELLAY, Hungary, **2267**.

(*g*) South Europe and Mediterranean Basin.

Coleoptera: ESCALERA, *Dorcadion*, Spain, **740**; FUENTE, Spain and Balearics, **854**; HOLDHAUS, Tyrrhenian fauna, **1052**. — *Hymenoptera*: BLÜTHGEN, *Halictus*, Spain, **238**; FINZI, Formicidae, Elba, **789**. — *Lepidoptera*: ANDRES & SEITZ, Egypt, **62**; BURESCH & ILTCHEFF, Balkans, **342**; HOLDHAUS, Tyrrhenian fauna, **1052**; LE CERF, Morocco, **1324**; STAUDER, Lower Italy, **2098**. — *Diptera*: SÉGUY, Culicidae, N. Africa & Syria, **1986**.—*Hemiptera*: BODENHEIMER, Coccidae, Palestine, **244**. — *Odonata*: MORTON, Palestine, **1552**.

(*h*) Caucasus, West & Central Asia.

Coleoptera: WICHMANN, Ipidae in Asia Minor, **2360**.

Africa.

Coleoptera: BURGEON, Cetoniidae, Belgian Congo, list, **344**; JACK, *Heteronychus*, **1119**; LESNE, Bostrychidae, French Tropical Africa, **1349**. —*Hymenoptera*: BRUES, Evaniidae & Braconidae, S. Africa, **316**; SANTSCHI, *Plectroctena* (Form.), **1901**. — *Lepidoptera*: AURIVILLIUS, Lycaenidae, **84**; HIGGINS, *Hesperia*, **1039**; JANSE, list of Pyralidae of C. Africa, **1128**; LE CERF, Eritrea, **1320**. — *Diptera*: BEZZI, Bombyliidae, Africa, **198**, Nemestrinidae, S. Africa, **206**, Mydaidae S. Africa, **207**, Trypetidae, S. Africa, **208**; CURRAN, Dolichopodidae, S. Africa, **536**; MALLOCH, *Hydrotaea*, *Hylemyia*, *Emmesomyia* (Anthom.), **1434**. — *Ephemeroptera*: LESTAGE, S. Africa, **1358**.

Madagascar & Mascarene Islands.

Madagascar. *Coleoptera*: JANSON, Cetoniidae, **1131**; OBENBERGER, Buprestidae, **1637**; PIC, **1735**; VOSS, *Euops* (Curc.), **2297**. — *Lepidoptera*: LE CERF, *Papilio*, **1325**; ROTHSCHILD, Noctuidae, Lithosiidae, Syntomidae, **1878**. — *Neuroptera*: NAVÁS, *Gandulus madegassus*, **1600**. — *Diptera*: BEZZI, *Aciura* (Trypet.), **201**.— *Orthoptera*: UVAROV, *Finotina* (Acrid.), **2249**.

Rodriguez. *Coleoptera*: JORDAN, Anthribidae, **1157**. — *Lepidoptera*: MEYRICK, **1519**. — *Hemiptera*: CHINA, **412**.

Seychelles. *Coleoptera*: CHAMPION, Malacoderms, **399**; SCOTT, Ptinidae & Anobiidae, **1983**. — *Orthoptera*: BOLIVAR, Blattidae & Mantidae, **251**

Asia Tropical and Eastern.
(Including Japan.)

Insecta: OKAMOTO, Quelpart I. (off Korea), **1652**. — *Coleoptera*: ACHARD, Scaphidiidae of Japan, **2**; ANDREWES & SCOTT, list of Carabidae of Macao, **69**; CHATTERJEE, Nitidulidae of India, catalogue, **405**; VAN EMDEN, Sandalinae, Formosa, **715**; GILLET, Ceylon Lamellicornia, **885**. — *Lepidoptera*: FRUHSTORFER. Lycaenidae, **849**; JOICEY & TALBOT, Hainan, catalogue, **1147**; SEITZ, Lycaenidae, **1990**. — *Diptera*: BARRAUD, Indian Culicinae, **138**; BECKER, Pipunculidae, Formosa, **158**; BRUES, Phoridae, Formosa, additions, **314**; PATTON & SENIOR-WHITE, Oriental spp. of *Musca*, **1689**; SENIOR-WHITE, Trypetidae, India, catalogue, **1997**, Sarcophaginae, Oriental Region, **2000**.—*Hemiptera*: KUWANA, Coccidae of Japan, **1279**; TAKAHASHI, Aphididae of Formosa, **2151**. — *Isoptera*: LIGHT, Termites of China, **1363**. — *Odonata*: FRASER, Yunnan, **825**. — *Orthoptera*: CHANG, Acrididae of China, **403**;

CHOPARD, Dermaptera & Orthoptera, Barkuda I., India, **436.** — *Collembola*: CARPENTER, Siju Cave, Garo Hills, Assam, **374.**

Asiatic Archipelgo.

Coleoptera: AURIVILLIUS, Cerambycidae of Simalur Isl., **82**; BOUCOMONT, *Onthophagus*, Philippines, **269**; CHAPIN, Philippine Cleridae, **404**; GILLET, Copridae, Sumatra, **884**; HELLER, Curculionidae, Philippines, **1011**; MOSER, Melolonthid, Philippines, **1560**; OBENBERGER, Buprestidae, **1639**; PIC, Lampyrid & Telephorid, Philippines, **1748.** — *Hymenoptera*: OVERBECK, list of ants, Singapore distr., **1669**; WHEELER, ants of Krakatau, **2358.**—*Lepidoptera*: FRUHSTORFER, Lycaenidae, **849**; HULSTAERT, new Rhopalocera, **1075**, new Heterocera, **1076**; JANSE, list of Pyralidae of Ceram, **1129**; MEYRICK, new Microlepidoptera, New Guinea, **1518**; ORMISTON, butterflies of Ceylon, **1665**; SEITZ, Lycaenidae, **1990.** — *Diptera*: EDWARDS, Culicidae of New Guinea, **684.**—*Odonata*: LAIDLAW, Ceylon, catalogue, **1288.** — *Orthoptera*: CAUDELL, Blattidae, Malaya & India, **390**; KARNY, Malay Archip., **1170.**

Australia and Tasmania.

Coleoptera: GOUDIE, Malacoderms and Heteromera of N.W. Victoria, **905.** — *Lepidoptera*: BURNS & THORN, butterflies in Northern N.S.W. & Southern Queensland, **347**; FRUHSTORFER, Lycaenidae, **849**; SEITZ, Lycaenidae, **1990.** — *Diptera*: EDWARDS, Culicidae, Australasian Region, **684**; HARDY, new Bombyliidae, **960**; MALLOCH, **1438**; TONNOIR, Blepharoceridae, **2203**, Dixidae, **2204.** — *Orthoptera*: TINDALE, Mantidae, **2198.**

America, collectively.

Lepidoptera: DRAUDT in Seitz, Noctuidae, **617.**—*Diptera*: DYAR & SHANNON, *Uranotaenia* (Culic.), **669**, Thaumalidae, **672.**—*Hemiptera*: TORRE-BUENO, *Microvelia*, **2210.**—*Orthoptera*: HEBARD *Taeniopoda* (Acrid.), **987.**

North America.

Insecta: CRIDDLE & OTHERS, Entomological Record for Canada, 1920, 1921, 1922, 1923, 51st–54th Ann. Repts. Ent. Soc. Ontario, Toronto, 1921–24, pp. 72–90, 57–70, 76–90 & 87–102.—*Coleoptera*: BEAULNE, Canada, **155**; BLATCHLEY, Chrysomelidae, Florida, **230**; MUTCHLER & WEISS, Meloidae, New Jersey, **1584.**—*Hymenoptera*: CUSHMAN, Ichneumonidae, Robben Island, Okhotsk Sea, **541**; FOUTS, Platygasterinae, **821**; SMITH, ants of Mississippi, **2047.** — *Lepidoptera*: BARNES & BENJAMIN, *Sympistis* (Noct.), **127**; FORBES, Microlepidoptera, Pyralidae and Bombyces of New York and neighbouring States, **811.**—*Diptera*: ALDRICH & WEBBER, *Phorocera* and allied genera, **28**; ALEXANDER, Tipulidae, New York, **39**; DYAR, Culicidae, Colorado, **644**; MALLOCH, *Fannia* (Anthom.), **1434**; MALLOCH & MCATEE, Drosophilidae, **1441**; MATHESON, Culicidae, **1477**; SHANNON & DOBROSCKY, *Protocalliphora*, **2015.** — *Hemiptera*: STONER, Scutellerinae, Iowa, **2129.**—*Odonata*: WALKER, Thunder Bay District, Ont., **2306.**—*Orthoptera*: HENDERSON, Oedipodinae of Utah, **1017**; MORSE, Acrididae, **1548.**—*Protura*: EWING, Florida, **750.**

Central America.

Orthoptera: HEBARD, Acrididae of Panama, **984.**

Antilles.

Insecta: WOLCOTT, annotated list of Insects of Porto Rico, **2386.**—*Coleoptera*: OCHS, Gyrinidae, **1642.**—*Hymenoptera*: WHEELER, Formicidae, Barbados and Antigua, **2352.**—*Hemiptera*: TORRE-BUENO, aquatic, Barbados and Antigua, **2214**; STONER, Scutellerinae, Barbados and Antigua, **2130**; BARBER, Heteroptera, Barbados and Antigua, **117.**—*Orthoptera*: CAUDELL, Barbados and Antigua, **384.**

South America.

Lepidoptera: FORBES, *Mechanitis* (Danaid.), **812**; JORDAN, *Homoeopteryx*, *Janiodes*, *Oxytenis*, **1155**; KÖHLER, Heterocera, **1234**; RILEY, *Pyrrhopygopsis* (Hesp.), **1841**; STICHEL, Riodinidae, **2115**, **2119.**—*Diptera*: NUÑEZ TOVAR, blood-sucking Diptera of Venezuela, **1631**, **1632.**—*Orthoptera*: HEBARD, Proscopinae (Acrid.), **988.**

III.—SYSTEMATIC.

GENERAL.

Influence of artificial blinding on the structure of brain of insects, ALVERDES Zs. Morph. Ökol. **2** p. 189 figs.

Manual of Agricultural Entomology, 2nd Edn., BERLESE Florence 1924 512 pp. 420 figs.

Adipose tissue in insects, BUYS J. Morph. **38** pp. 485–527 8 pls.

Insects: their structure and life. A Primer of Entomology, 2nd Edn., CARPENTER London and Toronto 1924 xi + 335 pp. 4 pls. 184 figs.

Some Insects from the Chilibrillo bat caves of Panama, CAUDELL Insec. Ins. Menstr. **12** pp. 133–136.

Manual of Forest Entomology, CECCONI Padua 1924 680 pp. 786 figs.

The phylogeny and classification of insects, CRAMPTON J. Ent. and Zool. **16** pp. 33–47.

Insects collected in Canada during years 1920, 21, 22 and 23, CRIDDLE and others, Repts. Ontario Ent. Soc. **1920, 21, 22** and **23**, pp. 72–90, 57–70, 76–90 and 87–102, respectively.

Effects of various alkaloids on the central nervous system of insects, CROZIER & PILZ Amer. J. Physiol **69** p. 41.

Praemaxillae of insects, EIDMANN Zool. Anz. **58** p. 48.

Growth and ecdysis in insects, EIDMANN Zs. Morph. Ökol. **2** pp. 567–610 16 figs.

Sur la polarisation circulaire de la lumière réfléchie par les insects, GAUBERT C. R. Acad. Sci. **179** pp. 1148–1150.

Suggestions for terminology of leafmines, HEDICKE & HERING D. ent. Zs. **1924** pp. 165–194, 13 figs.

Morphological importance of holometabolous larvae, JĚZHIKOV Ent. Mitt. **13** pp. 238–242.

Review of work on immunity in insects, JUCCI Ann. d'Igiene **34** pp. 814–832.

Senses in flower fertilisation, KNOLL Naturwissenschaften **12** p. 988.

Insect life in Austria with notes on galls and similar deformations and their producers, MADER 1920 216 pp.

Kinds of food of insects, MEISSNER Intern. ent. Zs. **18** p. 185.

Lists of parasites and their hosts, RUHL Soc. ent. **39** p. 31.

Handbook of Entomology, SCHRÖDER Jena Lief. 5–14, 1922–24.

Insect Parasites of man and domestic animals, SÉGUY Paris 1924 422 pp. 463 figs.

Relation between the primary and secondary sexual characters of insects, STÖCKHERT Arch. Natg. **90** A2 pp. 109–131.

The principles of insect control, WARDLE & BUCKLE Manchester and London 1923 295 pp. 1 pl. 32 figs.

Insect food habits and vegetation, WEISS Ohio J. Sci. **24** pp. 100–106.

Parasitic worms in insects, WÜLKER Intern. ent. Zs. **17** pp. 138–144, 147–150.

Nervous system of insects, ZAWARZIN Zs. wiss. Zool. **122** pp. 97, 323.

COLEOPTERA.

Joints of femur and tibia of Coleoptera, BAYER Zs. Morph. Oekol. **1** p. 373 figs.

Coleoptera of Canada [continued in] BEAULNE Nat. canad. **50** & **51**.

Wing venation in Coleoptera, BERNET KEMPERS Ent. Mitt. **13** pp. 45–63 fig

Irregularities in larvae and nymphs of Coleoptera, BERTRAND Ann. Soc. ent. Fr. **1923** pp. 339–344.

Coleopterous remains from the peatbed at Wolvercote, Oxfordshire, BLAIR Trans. Ent. Soc. **1923** 1924 p. 558.

Catalogue of Coleoptera of Provence, CAILLOL Soc. linn. Provence pt. i 1908 pp. 588, pt. ii 1913–1914 pp. 608.

Notes on North American Coleoptera, synonymy, new species, CASEY Mem. Col. **11** pp. 1–347.

Production of spermatophores in Coleoptera, CROS Bull. Soc. Sci. nat. Maroc **4** pp. 98–103.

Coleoptera collected in Trebizond and Gümisch-chane districts of Asia Minor, EICHLER Polsk. Pismo ent. **2** pp. 172–175, **3** pp. 80–87.

Corrections to "Coleoptera Neerlandica" III, EVERTS Ent. Ber. **6** pp. 277–285.

Coleoptera at Eisleben supplementary to Eggers' list 1901, FEIGE & KÜHLHORN Ent. Bl. **20** pp. 17–26.

Leaf mining habit in the Coleoptera, Part I, FROST Ann. Ent. Soc. Amer. **17** pp. 457–467 fig.

Catalogue of Coleoptera, Spain and Balearic Islands, DE LA FUENTE Y MORALES Bol. Soc. ent. españa **7** pp. 20–32, 35–50, 67–82, 88–103, 109–124.

Notes on Finnish Coleoptera, HELLÉN Not. ent. **4** pp. 87–92.

New species of Coleoptera described by Edm. Reitter in 1916–1920, HETSCHKO Wiener ent. Ztg. **41** pp. 159–162.

Distribution and characters of Tyrrhenian Coleoptera, HOLDHAUS Ann. Nat. Hist. Mus. Wien **37** pp. 30, 152.

Notes on some Swedish Coleoptera, JANSSON Ent. Tidskr. **45** pp. 145–155.

Notes on Coleoptera from Poland, KINEL Polsk. Pismo ent. **2** pp. 191–196.

The structure, biology, observation, breeding and collecting of beetles, KRANCHER & UHMANN 1924 190 pp. fig.

Catalogue of Coleoptera of Hungary, KUTHY Fauna Reg. Hung. Col. **1918** pp. 5–213.

Prothetely in Coleopterous larvae, LENGERKEN Zool. Anz. **58** p. 179 figs.

Biology of German Coleoptera, LENGERKEN Biol. Tiere Deutsch. Teil 40 pp. 1–104 figs.

Coleoptera rare or new to Poland, PATKIEWICZ Polsk. Pismo ent. **2** pp. 186–188.

Catalogue of Coleoptera of Bulgaria, RAMBOUSEK Trav. Soc. bulgar. Sci. nat. **5** 1912 pp. 57–113.

Notes on Coleoptera, ROUBAL Soc. ent. **39** p. 17.

Faunistic notes on German Coleoptera, UHMANN Ent. Bl. **20** pp. 55–57.

Catalogue of palaearctic Coleoptera —Cicindelidae, Carabidae, Amphizoidae, Hygrobiidae, Haliplidae, Dytiscidae, Gyrinidae, Rhysodidae, Cupedidae, Paussidae, WINKLER Catal. Col. Reg. Pal. pars 1 & 2 pp. 1–240.

List of Coleoptera from Bengasi (Cyrenaica), ZANON Mem. Soc. ent. ital. **1** 1922 pp. 112–139.

CICINDELIDAE.

Descriptive catalogue of Cicindelidae with keys to spp. of Minussinsk region, LUTSHNIK Jahrb. Martjanov. Staatsmus. **2** 1 p. 1.

Amblycheila ventricosa **sp. n.** p. 1 Arizona, key p. 2, CASEY Mem. Col. **11.**

Cicindela melancholica **var. n.** *deprimozi* B.E. Afr. p. 7 fig., BABAULT Voy. Babault Afr. or. angl. **1921.**—*C. flexuosa* **f. n.** *albuferensis* Spain p. 393 figs., BAGUENA CORELLA Bol. Soc. esp. H. nat. **24.**—*C. montana* **subsp. n.** *uteana*; *oslari* **subspp. n.** *densissima* p. 12, *estesiana*, *terracensis*; *ostenta* **subsp. n.** *columbiana* p. 13; *scutellaris* **subsp. n.** *billingsi*; *parowana* **subsp. n.** *remittens* p. 14; *kirbyi* **subsp. n.** *uintana* p. 15; *oregona* **subsp. n.** *oregonella*; *pacifica* **var. n.** *nevadiana* p. 16; *shantzi*, *spaldingi* p. 14, *provensis* (with **subspp. n.**, *mormonella*, *nephiana*) p. 15, **spp. n.** N. America, *lineoscripta* **n. n.** for *semipicta*, CASEY Mem. Col. **11.**—*C. dilatotarsa*, *microcephala* **spp. n.** Philippines p. 87, HORN Phil. J. Sci. **24.**—*C. coquereli*, resemblance to *C. quadriguttata* p. 215 fig., HORN Ent. Mitt. **13.**—*C.* (*Pentacomia*) *lanei* **sp. n.** Brazil p. 47, HORN Bul. Soc. Stiinte Cluj. **2** Sci. nat.—*C. rhytidopteroides* Bengal p. 89, *pseudonana*, *pseudo-interposita* Philippines p. 90, **spp. n.**, HORN Mem. Dept. Agric. India **8.**—*C. repanda-unijuncta* **f. n.** *duncani* Arizona p. 126, KNAUS J. N. Y. Ent. Soc. **32.**—*C. lunulata* Fbr. ab. *lebisi* Tarel, rectification p. 46, **abb. n.** *viricuprea*, *tareli* France p. 47,

LEBIS Misc. ent. **28.**—*C. maritima* Latr. a good species pp. 46–50 fig., LEWEK Ent. Bl. **20.**—*C. silvatica* **var. n.** *pseudotypica* (= var. *humeralis* Beuth.) p. 19, *coerulea nitida* Licht. (=*tricolor* Ad. 1817) p. 21 (with **abb. n.** *starovi, starodubtzevi, poppiusi, cobaltina*) p. 23, *sahlbergi* **subsp. n.** *kozhantshikovi* p. 25, *lunulata* **ab. n.** *gerassimovi* p. 31 Siberia, LUTSHNIK Jahrb. Martjanov. Staatsmus. **2** 1.—*C. acuniae* **sp. n.** fig. Cuba pp. 1–3, MUTCHLER Amer. Mus. Novit., no **106.**—*C.*, notes on Arctic pp. 283–288, MUNSTER Norsk ent. Tidsskr. **1.**—*C. hybrida* **var. n.** *magdelainei* France p. 58, SIRGUEY Misc. ent. **27.**—*C. lunulata* **ab. n.** *lebisi* France p. 76 fig., TAREL Misc. ent. **27.**

Dromica pseudocoarctata, pilosifrons p. 23, *o'neili* p. 24, **spp. n.** Rhodesia, HORN Proc. Rhod. Sci. Ass. **23.**

Myrmecoptera bouvieri **sp. n.** B.E.A. p. 13 fig., BABAULT Voy. Babault Afr. or. angl. **1921.**

Omus lucidicollis a good sp.; *cephalicus* **subsp. n.** *audens* p. 3; *ambiguus* **subsp. n.** *socius* p. 4; *cupreonitens* **subsp. n.** *reynoldsi*; *sculptilis* **subspp. n.** *densicollis* p. 5, *argutus*; *mimus* **subspp. n.** *debiliceps, insulus* p. 6, *modicus, stolidus, subparallelus* p. 7; *ventricosus* **sp. n.** *leachi* **subsp. n.** p. 8; *pullatus* **sp. n.**; *vermiculatus* **subsp. n.** *pollens* p. 9; *californicus* **subspp. n.**, *turbulentus, aethiops, sparsus* p. 10; *blaisdelli* **subsp. n.** *torvus*; *cribripennis* **subsp. n.** *maurus* p. 11; *horni* **subsp. n.** *callosus* p. 12 U.S.A., CASEY Mem. Col. **11.**

Prothyma hopkinsi **subsp. n.** *confluente-angustata* Philippines p. 91, HORN Mem. Dept. Agric. India **8.**—*P. discretepunctata* **sp. n.** Philippines p. 88, HORN Phil. J. Sci. **24.**

Therates batesi **subsp. n.** *testaceipennis* Philippines p. 91, HORN Mem. Dept. Agric. India **8.**

CARABIDAE.

List of Carabidae from Macao, S. China, biological notes, ANDREWES & SCOTT Ann. Mag. N. H. (9) **13** p. 468.

Synonymical and other notes on Oriental Carabidae, ANDREWES Ann. Mag. N. H. (9) **14** p. 585.

Oriental Carabidae of the "Reise Novara" notes & synonymy, ANDREWES Trans. Ent. Soc. **1923** pp. 459–468.

Carabidae of "sub-Pyrenees," LOUVET Misc. ent. **28** pp. 13–20.

Descriptive catalogue of Carabina with keys to spp. of Minussinsk region, LUTSHNIK Jahrb. Martjanov. Staatsmus. **2** 1 p. 33.

Terminology of wing veins of Carabidae, OERTEL Zs. Morph. Oekol. **1** p. 793 figs.

Carabid fauna of Schleswig Holstein, SCHUBART Ent. Jahrb. **31** 1922 pp. 105–116.

A method for classifying Carabid larvae, VAN EMDEN Ent. Jahrb. **32** 1923 pp. 101–114 fig.

Abacetus lucifugus **sp. n.** Assam p. 116, ANDREWES Rec. Ind. Mus. **26.**

Acamegonia peregrinatrix **subsp. n.** *incerta* Panama p. 30, DE LAPOUGE Misc. ent. **28.**

Acupalpus subrectus p. 143, *curtipennis, canadensis* p. 144, **spp. n.** N. America, CASEY Mem. Col. **11.**

Agonum uintanus, amens p. 83, *invalidum, rhodeanum* p. 84, *terracense* p. 85, **spp. n.**, *cupreolucens* **n. n.** for sp. identified as *seminitidum* Kirby p. 83 N. America, CASEY Mem. Col. **11.**

Amara nila p. 96, *tiruka* p. 97 (*Cumeres* **subgen. n.** p. 98) *lamia* p. 99, **spp. n.** India figs., ANDREWES Mission Babault Inde. Carabidae **1924.**—*A. messae* **sp. n.** Cyrenaica p. 64 fig., BALIANI Boll. Soc. ent. ital. **56.**—*A. oodiformis* p. 58, *convergens, neoscotica* p. 59, *viridula, oblongiformis, leviceps* p. 60, *pullmani, acomana* p. 61, *sodalicia, microcephala, reticollis* p. 62, *wadei, obliqua, inflaticollis* p. 63, *subarctica, cockerelli* p. 64, *breviformis, carriana* p. 65, **spp. n.** N. America, *acuticauda* **n. n.** for *acuminata* Casey nec Payk. p. 58, CASEY Mem. Col. **11.**—*A.* (*Triaena*) *fulvipes* **var. n.** *etschmiadsina* Caucasus p. 64, EICHLER Polsk. Pismo ent. **3.**

Amblystomus resectus **sp. n.** India p. 91, ANDREWES Mission Babault Inde. Carabidae 1924.

Amphasia mollis **sp. n.** Illinois p. 131, CASEY Mem. Col. **11.**

Anadaptus uteanus **sp. n.** N. America p. 136, CASEY t.c.

Anchomenus benardi p. 102, *caesitius* p. 104, *eurous* p. 105, **spp. n.** India, ANDREWES Mission Babault Inde. Carabidae 1924.—*A. missourianus, albertanus, uteanus* p. 81, *amplicollis* p. 82, **spp. n.** N. America, CASEY Mem. Col. **11.**

Anentmetus **gen. n.** p. 585, *pluto* p. 586 **sp. n.** India, ANDREWES Ann. Mag. N. H. (9) **14.**

Anisodactylus tioganus, lacertosus p. 123, *aleneanus, comes, maestus* p. 124, *viridans* p. 125, **spp. n.** N. America, CASEY Mem. Col. **11.**

Anisotarsus hebes p. 136, *angusticollis, fuscipennis* p. 137, *parallelus, subovalis, inerrans* p. 138, *connivens* p. 139, *vernicatus* p. 140, **spp. n.** N. America, CASEY t.c.

Anomotarus decoratus **sp. n.** Ceylon p. 139, ANDREWES Spol. Zeyl. **13.**

Anophthalmus kenderessyi **sp. n.** Serbia p. 15, MALLASZ Bul. Soc. Stiinte Cluj. Sci. nat. **2.**

Apotomopterus stoetznerianus, hector p. 1, *hupeensis* p. 2, *buycki, infirmior* p. 6, *achilles* p. 7, **spp. n.** China, HAUSER Soc. ent. **39.**

Apristus cupreus **sp. n.** Ceylon p. 140, ANDREWES Spol. Zeyl. **13.**—*A. zajtzewi* **sp. n.** Caucasus p. 64, EICHLER Polsk. Pismo ent. **3.**

Asaphidion championi **sp. n.** India p. 84 fig., ANDREWES Mission Babault Inde. Carabidae 1924.

Autocarabus auratus subsp. *honnoratii* **ab. n.** *olivarius, auratus* subsp. *ligericinus* **ab. n.** *ispaniacus*, France p. 85, NICOLAS Misc. ent. **24** 1919.

Bembidium pluto, gagates p. 72, *himalayanum* p. 74, *luntaka* p. 75, *aquilum* p. 76, *limatum, hasurada* p. 77, *leve* p. 78, *ladas* p. 79, *babaulti* p. 80, *exaratum* p. 81, *betegara* p. 82, *uvidum* p. 85, **spp. n.** India figs., ANDREWES Mission Babault Inde. Carabidae 1924. —*B. luniferum* p. 192, *satanas* p. 193, *ladakense* p. 195, *rubidum* p. 196 India, *bakeri* p. 197, Philippine Is., **spp. n.**, *dardum, bracculatum* redescribed p. 194, ANDREWES Ent. Mo. Mag. **60.**—*B.* (*Bembidion*) *tacomae* p. 22, *marginosum, carrianum* p. 23, *ferreum, edolatum* p. 24, *perbrevicolle, improvidens* p. 25, *expansipenne, essexense* p. 26, *notmani, carolinense* p. 27, *keeneanum, placeranum, sierricola* p. 28, *marinianum, modocianum* p. 29, *alpineanum, tuolumne* p. 30, *viridinigrum, govanicum, subaerarium* p. 31, *speculinum* p. 32, *angustior* p. 33, *debilicolle, modulatum, exiguiceps* p. 34, *aversans, urgens, concitatum* p. 35, *oblectans, fortunatum, amplipenne* p. 36, *edmontonense, subexiguum, contristans* p. 37, *haustum, auxiliator* p. 38, *accuratum, semiopacum* p. 39, *spissicorne, albertanum* p. 40, *assensum, terracense, wisconsinium* p. 41, *oregonum, nogalesium* p. 42, *vilescans, canadianum* p. 43, **spp. n.**, *zephyrum* **subsp. n.** *tristiculum* p. 22, *laevigatum* **subsp. n.** *delawarense* p. 24, *nitidum* **var. n.** *josephineum* p. 25, N. America, CASEY Mem. Col. **11.**—*B. ricksecker*i see *Phrypeus.*—*B.* (*Pogonidium*) *quadricolle* **var. n.** *gümischchanense* Caucasus p. 62, EICHLER Polsk. Pismo ent. **3.**

Blethisa hudsonica **sp. n.** Canada p. 18, CASEY Mem. Col. **11.**

Bothriopterus angusticollis **sp. n.** Utah p. 77, CASEY t.c.—*B. angustatus* biology p. 64, DAUPHIN Misc. ent. **27.**

Brachynus stevensi p. 107, *reyi* p. 108, **spp. n.** India figs., ANDREWES Mission Babault Inde. Carabidae 1924.—*B.* (*Pseudoaptinus*) *matchai* **sp. n.** Sierra Nevada p. 5, ARNOST Casopis **21.**—*B. crepitans* **var. n.** *flavosuturatus* Caucasus p. 65, EICHLER Polsk. Pismo ent. **3.**

Bradytus neomexicanus, spaldingi p. 48, *maxwelli* p. 49, **spp. n.** N. America, CASEY Mem. Col. **11.**

Calathus clarus **sp. n.** India p. 101, ANDREWES Mission Babault Inde. Carabidae 1924.

Callipara maximowiczi **subspp. n.** *taqueti* Korea p. 33, *touzalini* China p. 34, DE LAPOUGE Misc. ent. **28.**

Callisthenes karelini **subsp. n.** *karagaicus* Asiatic Russia p. 29, DE LAPOUGE Misc. Ent. **28.**

Campalita calida **subsp. n.** *maroccana* Morocco p. 36, DE LAPOUGE t.c.

Cancellocarabus **subgen. n.** see *Carabus.*

Carabops kovácsi **sp. n.** Abyssinia p. 21, CSIKI Folia ent. hung. **1.**

Carabulus **subgen. n.** see *Carabus*.

Carabus aumonti distribution p. 40, ALLUAUD Bull. Soc. Sci. nat. Maroc **4.**—*C. auronitens* **ab. n.** *letacqi* France p. 65, ANTOINE Misc. ent. **24** 1919.—*C. melancholicus* **subsp. n.** *castiliensis, galicianus* **subsp. n.** *beirensis* Spain and Portugal p. 9, BORN Soc. ent. **39.**—*C. concolor* subspp. *hortensoides* and *bernensis*, distribution pp. 13–15, BORN Schweiz. ent. Anz. **3.**—*C.*, Eastern Alpine pp. 1–20, BREUNING Koleopt. Rdsch. **11.**—*C.* (*Lamprostus*) *nordmanni* **var. n.** *trapesuntica* Asia Minor p. 61, (*Trachycarabus*) *haeres* **var. n.** *acutangulus* Rostov p. 62, EICHLER Polsk. Pismo ent. **3.**—*C. auratus* races pp. 62–64, LEBIS Misc. ent. **27.**—*C. lefebvrei* **var. n.** *lombardii* Italy pp. 5 and 87–89, LUIGIONI Boll. Soc. ent. ital. **56.**—*C. lefebvrei* var. *lombardii*, origin pp. 41–43, RASETTI Boll. Soc. ent. ital. **56.**—*C.* **subgenn. n.** *Carabulus, Sajanocarabus* p. 37, *Cancellocarabus* (**n. n.** for *Goniocarabus*, Reitt.) p. 38, *ermaki* **n. n.** for *amoenus* Chaud. p. 41 (with **var. n.** *mestsherjakovi* p. 42), *kozhantschikovi* p. 43, *martjanovi* p. 45, **spp. n.** Siberia, LUTSHNIK Jahrb. Martjanov. Staatsmus. **2** 1.—*C. violaceus* **var. n.** *poussielguei* Venetia p. 34, NICOLAS Misc. ent. **28.**—*C.* rudimentary wings p. 38 figs., OERTEL Zs. Morph. Oekol. **1.**—*C. festivus* **var.** *pumicatus* **subvar. n.** *auratopumicatus* France p. 58, SIRGUEY Misc. ent. **27.**

Casnonia picta, suturalis notes on, pp. 147–148, SCHAEFFER Bull. Brooklyn Ent. Soc. **19.**

Celia piperi p. 49, *vancouveri, olympia, subsimilis* p. 50, *marginatella, parallela, albertae* p. 51, *columbiana, funebris* p. 52, *winnipegensis, govanensis, fragilis* p. 53, *frugalis, explanatula* p. 54, *maneei, tahomae, washoeana* p. 55, *cervicallis, pugetana, idahoana* p. 56, *parowana, minnesotana* p. 57, *piceonitens* p. 58, **spp. n.** N. America, CASEY Mem. Col. **11.**

Celiamorphus municeps p. 117, *subtropicus, nanulus* p. 118, **spp. n.** N. America, CASEY t.c.

Chlaenius pulcher Nietn. (= *marginifer* Chaud.) p. 132, **subsp. n.** *fumatus* India; subsp. *asper* India a good sp., *cyanostolus* **sp. n.** Ceylon p. 133, ANDREWES Spol. Zeyl. **13.**—*C. ostrinus* **sp. n.** p. 88, *comans* **var. n.** *exoletus* p. 89 India, ANDREWES Mission Babault Inde. Carabidae 1924.—*C. albertanus* **sp. n.** Canada p. 93, CASEY Mem. Col. **11.**—*C. decipiens* var. *laticollis* **f. n.** *viridis* Asia Minor p. 63, EICHLER Polsk. Pismo ent. **3.**

Chrysocarabus lineatus subsp. *ursius* **var. n.** *incostatus, auronitens* **var. n.** *allevardensis*, France p. 84, NICOLAS Misc. ent. **24** 1919.

Coleolissus iris **sp. n.** Ceylon p. 135, ANDREWES Spol. Zeyl. **13.**

Craspedophorus microspilotus **sp. n.** Ceylon p. 131, ANDREWES t.c.

Cumeres **subgen. n.** see *Amara*.

Curtonotus subtilis, albertanus p. 45, *gilvipes, brevipennis, manitobensis* p. 46, *durus, biarcuatus* p. 47, **spp. n.** N. America, CASEY Mem. Col. **11.**

Cychrus caraboides **subsp. n.** *zariquieyi* Pyrenees p. 9, BORN Soc. ent. **39.**—*C. andrewsi* see *Steniridia*.

Cyclosomus inustus **sp. n.** Hong Kong p. 465, ANDREWES Trans. Ent. Soc. **1923.**

Cyclotrachelus fallaciosus **sp. n.** Florida p. 77, CASEY Mem. Col. **11.**

Cymindis babaulti **sp. n.** India p. 118 fig., ANDREWES Mission Babault Inde. Carabidae 1924.—*C. kirbyi, parowana* p. 88, *planifera, govanica, obliqua* p. 89, *sinuata, alternans* p. 90, **spp. n.** N. America, CASEY Mem. Col. **11.**—*C. andreae* **ab. n.** *immaculata* Caucasus p. 65, EICHLER Polsk. Pismo ent. **3.**—*C. carnica* **sp. n.** Carniola p. 71, MÜLLER Boll. Soc. ent. ital. **56.**

Dicheirus firmus, multiplex p. 132, *beniciensis, exiguus* p. 133, *gracilis, incidens* p. 134, *facilis, sodalis* p. 135, **spp. n.**, *multiplex* **subsp. n.** *validicornis* p. 133, N. America, CASEY Mem. Col. **11.**

Dioryche convexa **sp. n.** Central Provinces p. 91, ANDREWES Mission Babault Inde. Carabidae 1924.

Discoderus papagonis, texanus p. 119, *dallasensis, peregrinus* p. 120, *parvuliceps, gener* p. 121, **spp. n.** N. America, CASEY Mem. Col. **11.**

Drypta argillacea **sp. n.** Central Provinces p. 106 fig., ANDREWES Mission Babault Inde. Carabidae 1924.

Duvalites crissolensis **sp. n.** Italy p. 134, DODERO Boll. Soc. ent. ital. **56.**—*D. paulae* **sp. n.** Basses-Alpes p. 130, FAGNIEZ Bull. Soc. ent. Fr. **1924.**—*D.* key to Serbian, *stankovitchi* p. 3, *georgevitchi* p. 5 (with **subsp. n.** *devojensis* p. 7), *winkleri* p. 8, *cvijici* p. 10 (with **subsp. n.** *stopicensis* p. 11), **spp. n.** Serbia fig., JEANNEL Bul. Soc. Stiinte Cluj Sci. nat. **2.**—*D. mariannae* **sp. n.** Transsylvania p. 146, KNIRSCH Ceskosl. ent. Spol. Jubil. Sbornik **1924.**

Duvalius carminatii subsp. *humeralis*, larva p. 145, BOLDORI Boll. Soc. ent. ital. **56.**—*D. carminatii* **subsp. n.** *humeralis* Italy p. 141, DODERO Boll. Soc. ent. ital. **56.**

Dyschirius, notes on European pp. 20–24, DEVILLE Koleopt. Rdsch. **11.**—*D. sahlbergi* **sp. n.** Kirghiz Steppes, *politus* **subsp. n.** *jenisseiensis* Siberia p. 68, *ruficornis* **subsp. n.** *tunisius* Tunisia p. 69, MÜLLER Boll. Soc. ent. ital. **56.**—*D.*, distribution of some European pp. 46–48, WEISSBERG Ann. Zool. Mus. polon. H.N. **2.**

Dysidius egens **sp. n.** N. America p. 74, CASEY Mem. Col. **11.**

Elaphrus rhodeanus, *bituberosus*, *texanus* p. 17, *spissicornis* p. 18, **spp. n.** N. America, CASEY Mem. Col. **11.**—*E. tumidiceps* **sp. n.** Norway p. 288, MUNSTER Norsk ent. Tidsskr. **1.**

Euferonia lacustris p. 71, *strigosula* p. 72, **spp. n.** N. America, CASEY Mem. Col. **11.**

Euharpalops **gen. n.** *wadei* **sp. n.** Oregon p. 116, CASEY t.c.

Europhilus carri p. 85, *frosti* p. 86, **spp. n.** N. America, CASEY t.c.

Eutelodontum depressicolle **subspp. n.** *digueti* p. 31, *techuacanum* p. 32, Mexico, DE LAPOUGE Misc. ent. **28.**

Evarthrinus inflatipennis **sp. n.** Illinois p. 78, CASEY Mem. Col. **11.**

Glycerius curticollis, *tahoensis* p. 140, *laticollis* p. 141, **spp. n.** U.S.A., CASEY t.c.

Goniocarabus Reitt. see *Carabus* (*Cancellocarabus* **subgen. n.**).

Hadrocarabus macrocephalus **var. n.** *urculoensis* France p. 85, NICOLAS Misc. ent. **24** 1919.

Harpalus caliginosus **subsp. n.** *dux* p. 94, *bracatus*, *ancillaris* p. 95, *cupreolatus*, *cuculus* p. 96, *immixtus*, *latescans* p. 97, *cupiens*, *feroculus* p. 98, *admissus*, *excubans* p. 99, *paratus* p. 100, *praestans*, *animosus* p. 101, *fanaticus*, *amiculus* p. 102, *spaldingi*, *conspectus*, *reversus* p. 103, *agitabilis*, *columbianus* p. 104, *obnixus*, *parowanus* p. 105, *contactus*, *uintanus*, *antiphon* p. 106, *fractus*, *instructus*, *assensus* p. 107, *maxwelli*, *blanditus* p. 108, *nivalis*, *dulciculus* p. 109, *captiosus*, *metuens*, *furviculus* p. 110, *stocktonensis*, *ventricosus*, *durescans* p. 111, *intactus*, *modulatus*, *leviceps* p. 112, *subenormis*, *provensis* p. 113, *beatulus*, *indigens* p. 114, *electus* p. 115, **spp. n.**, *fraternus* **subsp. n.** *nimius* p. 100, N. America, CASEY Mem. Col. **11.**—*H.* (*Actephilus*) *fleischeri* **sp. n.** Caucasus p. 63, EICHLER Polsk. Pismo ent. **3.**—*H. cupreus* **subsp. n.** *ragusae* Sicily p. 71, MÜLLER Boll. Soc. ent. ital. **56.**

Hemisopalus trepidus **sp. n.** Florida p. 117, CASEY Mem. Col. **11.**

Hypherpes terracensis, *stoicus* p. 68, *provensis*, *utensis* p. 69, *protensiformis*, *baldwini* p. 70, **spp. n.** N. America, CASEY t.c.

Iniopachys pyrenaeus **var. n.** *cephalotes* France p. 84, NICOLAS Misc. ent. **24** 1919.

Irichroa Newm. (= *Megaliridia* Casey) p. 336, *andrewsi* **subsp. n.** *reflexa* N. Carolina p. 22, CASEY Mem. Col. **11.**

Isiocarabus fiduciarius **subsp. n.** *chusanensis* China p. 2, NICOLAS Misc. ent. **28.**

Laemostenus elongatus **subsp. n.** *pentheri* Albania p. 70, MÜLLER Boll. Soc. ent. ital. **56.**

Lebia tempeana **sp. n.** Arizona p. 92, CASEY Mem. Col. **11.**

Lebidia bioculata **varr. n.** *amurensis* Amur, *himalayica* Kumaon p. 242, *pupillata* Japan p. 243, *octocelis* **sp. n.** Sikkim p. 244, key to spp. p. 248, ANDREWES Ann. Mag. N. H. (9) **14.**

Leistus spinibarbis, synonymy p. 105, BÄNNINGER Boll. Soc. ent. ital. **56.**

Licinus nitidior **sp. n.** Pyrenees p. 17, PIC Echange **39.**

Loxandrus cincinnati, breviusculus, **spp. n.** U.S.A. p. 80, CASEY Mem. Col. **11.**

Mastax enanthes **sp. n.** Ceylon p. 138, ANDREWES Spol. Zeyl. **13.**—*M. vegetus* p. 110, *annulatus* p. 111, *floridus* p. 112, **spp. n.** India figs. ANDREWES Mission Babault Inde. Carabidae, 1924.

Megaliridia see *Irichroa.*

Micromaseus longicollis **sp. n.** N. America p. 75, CASEY Mem. Col. **11.**

Monoferonia idahoanus **sp. n.** Idaho p. 78, CASEY t.c.

Nebria babaulti p. 67, *masrina* p. 68, **spp. n.** Kashmir fig., ANDREWES Mission Babault Inde. Carabidae, 1924. —*N. tibialis* **subsp. n.** *doderoi* p. 101, Italy, BÄNNINGER Boll. Soc. ent. ital. **56.**—*N. pallidissima, pugetana, townsendi* p. 19, *corvallis, curtulata* p. 20, *hippisleyi, fragilis* p. 21, **spp. n.** N. America, CASEY Mem. Col. **11.**

Olisthopus rotundatus **var. n.** *flavocinctus* Asia Minor p. 64, EICHLER Polsk. Pismo ent. **3.**

Omaseus aequalis p. 72, *brevibasis, tenuis, confluens* p. 73, *testaceus* p. 74, **spp. n.** N. America, CASEY Mem. Col. **11.** —*O.vulgaris* **var. n.** *arvernus* France p. 33, SIRGUEY Misc. ent. **28.**

Omophron lippensi p. 104, *schoutedeni* p. 105, *congoense* p. 107, *dissimile* p. 108, *ghesquièrei* p. 109, **spp. n.** Congo, DELÈVE Rev. zool. afr. **12.**

Omphra atrata ? eggs, larvae pp. 145–151 6 figs., CHOPRA Rec. Ind. Mus. **26.**

Oodes bivittatus **sp. n.** Ceylon p. 131, ANDREWES Spol. Zeyl. **13.**

Opadius piperi **sp. n.** Michigan p. 93, CASEY Mem. Col. **11.**

Oxylobus amyntas **sp. n.** Central Provinces p. 70 figs., ANDREWES Mission Babault Inde. Carabidae, 1924.—*O. ovalipennis* **sp. n.** Ceylon p. 130, ANDREWES Spol. Zeyl. **13.**

Panagaeus of Japan pp. 399–404, KANO Insect World **28.**

Paraduvalius **subgen. n.** see *Trechus.*

Patrobus canadensis **sp. n.** N. America p. 67, CASEY Mem. Col. **11.**

Pheggomisetes radevi **sp. n.** Bulgaria p. 164 fig., KNIRSCH Trav. Soc. bulg. Sci. nat. **11.**

Philophuga obscura, cobaltina p. 91, *uteana* p. 92, **spp. n.** U.S.A., CASEY Mem. Col. **11.**

Phrypeus **gen. n.** for *Bembidium rickseckeri* p. 43, *rutilinus* **sp. n.** p. 42, N. America, CASEY t.c.

Planetes muiri **sp. n.** Macao p. 471, ANDREWES Ann. Mag. N. H. (9) **13.**

Poecilus lucublandus **subspp. n.** *louisinus, acomanus ; elucens, planifer,* **spp. n.** N. America p. 76, CASEY Mem. Col. **11.**

Polyhirma erythreensis **sp. n.** Eritrea p. 52 fig., BÉNARD Bull. Soc. ent. Fr. **1924.**

Pristodactyla juabitica **sp. n.** Utah p. 87, CASEY Mem. Col. **11.**

Pristonychus kashmirensis **var. n.** *babaulti* Kashmir p. 100, ANDREWES Mission Babault Inde. Carabidae, 1924.

Pseudomorpha ruficollis **sp. n.** Louisiana p. 148, CASEY Mem. Col. **11.**

Pteropalus versutulus **sp. n.** N. Carolina p. 116, CASEY t.c.

Pterostichus urengaicus **sp. n.** Russia p. 144 fig., JURECEK Ceskosl. ent. spol. Jubil. Sbornik **1924.**

Sajanocarabus **subgen. n.** see *Carabus.*

Scaphinotus elevatus **subsp. n.** *neomexicanus* p. 1 ; *catalinae* p. 2 *johnsoni,* **spp. n.** ; *subtilis* **subspp. n.** *bullatus* p. 3, *grandis* p. 4 ; *longiceps* **sp. n.,** *angulatus* **subsp. n.** *maritimus* p. 5, key to species of subgenus. *Neocychrus* p. 6, U.S.A., VAN DYKE Pan-Pacific Ent. **1.**

Steniridia **gen. n.** for *Cychrus andrewsi* p. 336, CASEY Mem. Col. **11.**

Stenocellus carolinensis, veronianus, humboldtianus, **spp. n.** N. America p. 142, CASEY t.c.

Stenolophus bajaurae **sp.n.** India p. 95, ANDREWES Mission Babault Inde. Carabidae, 1924.—*S. testaceicollis, floridanus, extensicollis* p.145, *rivularis, curticollis* p. 146, **spp. n.** N. America, CASEY Mem. Col. **11.**

Stenomorphus parallelus, arcuatus, **spp. n.** N. America p. 122, CASEY t.c.

Stereocerus haematopus systematic position pp. 44–42, BUCHANAN Canad. Ent. **56.**

Steropus madidus **var. n.** *louveti* France p. 33, PUEL Misc. ent. **28.**

Tachistodes lyratus, obscurus p. 147, *convergens* p. 148, **spp. n.** N. America, CASEY Mem. Col. **11.**

Tachys micraulax **sp. n.** Assam p. 115, ANDREWES Rec. Ind. Mus. **26.**—*T. blandus* p. 85, *babaulti* p. 87, **spp. n.** Central Provinces figs., ANDREWES Mission Babault Inde. Carabidae 1924. —*T. subpunctatus* **sp. n.** Florida p. 164, BLATCHLEY Canad. Ent. **56.**—*T. 4-signatus* **var. n.** *fortepunctatus* Caucasus p. 62, EICHLER Polsk. Pismo ent. **3.**

Thalassophilus longicornis **var. n.** *obscuripennis* Tiflis p. 63, EICHLER Polsk. Pismo ent. **3.**

Trechus (*Paraduvalius* **subgen. n.** p. 163, *bulgaricus* **sp. n.** Bulgaria p. 164, KNIRSCH Trav. Soc. bulg. Sci. nat. **11.**—*T. schaumi* **subsp. n.** *sucainus* Cherso Island (Adriatic) p. 69, MÜLLER Boll. Soc. ent. ital. **56.**—*T. idriss* **sp. n.** Atlas Mts. p. 170, DE PEYERIMHOFF Bull. Soc. ent. Fr. **1924.**

Triaena lawrenceana, irregularis p. 66, *parallela* p. 67, **spp. n.** N. America, CASEY Mem. Col. **11.**

Trichocellus roborowskii **subsp. n.** *lissonotus* India p. 41, ANDREWES Mission Babault Inde. Carabidae 1924.

Triplectrus marginatus, brevior p. 126, *semirubidus, wolcotti* p. 127, *oblongus, sulcipennis* p. 128, *breviceps, longicollis*, p. 129, *kempi, paulus* p. 130, *beryllus* p. 131, **spp. n.** N. America, CASEY Mem. Col. **11.**

Xenodus **gen. n.** p. 92, *d'abreui* **sp. n.** Central Provinces p. 94 figs., ANDREWES Mission Babault Inde. Carabidae 1924.

Zabrus tenebrioides, biology pp. 257–261, WILKE Zs. wiss. Insektenbiol. **19.**

PAUSSIDAE.

Some Paussidae from Somaliland, GESTRO Boll. Soc. ent. ital. **56** pp. 17–19.

Archarthropterus **subgen. n.** see *Arthropterus.*

Arthropterus revision, notes, keys to Australian spp. in German museums pp. 65–82, *horni* p. 68, *ambitiosus, brunni* p. 69, *schroederi* p. 70, *limitans* p. 73, *pellax, suspectus, subangulatus* p. 74, *daemelianus* p. 76, *spadiceus* p. 77, *secedens* p. 81, **spp. n.**, *turneri* **subsp. n.** *avunculus* p. 72, *schismaticus* **subsp. n.** *inconstans* p. 78 Australia, KOLBE Ent. Mitt. **13.** — *A. novellus* New Guinea p. 72, *sphinx* Australia p. 79, **spp. n.**, DOHRN in KOLBE Ent. Mitt. **13.**—*A.* (*Archarthropterus* p. 349, *Peltarthropterus, Euarthropterus* p. 350, **subgenn. n.**), (*Panarthropterus*) *dohrni* **n. n.** for *howitti* Westw. p. 351 Australia, KOLBE D. ent. Zs. **1924.**—*A. discrepans* p. 5, *wasmanni* p. 6, *moretoni* p. 15, *ominosus* p. 16, *donovani, insidiosus, socius* p. 17, *petax* p. 18, *fraternus* p. 20, *simiolus* p. 21, *schismaticus* p. 22, *eruditulus* p. 24, *geminus* p. 25, *negligens* p. 26, *pervicax* p. 28, **spp. n.** Australia, KOLBE Tijd. Ent. **67.**

Euarthropterus **subgen. n.** see *Arthropterus.*

Peltarthropterus **subgen. n.** see *Arthropterus.*

HALIPLIDAE.

Keys, descriptions of Haliplidae, ZIMMERMANN Ent. Bl. **20** pp. 1–16.

Algophilus **gen. n.** p. 6, *lathridioides* **sp. n.** Cape Colony p. 65, ZIMMERMANN Ent. Bl. **20.**

Brychius elevatus **subsp. n.** *norwegicus* Norway p. 6, notes on variation of European spp. p. 1, MUNSTER Skr. Vid. selsk. Kristiania **1922** no. 9.

Haliplus lineaticollis larva and nymph pp. 321–338 fig., BERTRAND Ann. Soc. ent. Fr. **92** (1923).—*H.* revision p. 9, *fulvus* **var. n.** *sparreschneideri* p. 15 Norway, MUNSTER Skr. Vid. selsk. Kristiana **1922** no. 9. — *H. obliquus* and *confinis*, specific distinctions, pp. 29–32 figs., PEARCE Ann. Mag. N. H. (9) **13.**—*H. dorsomaculatus* N. America p. 75, *sauteri* Formosa p. 130, *basinotus* Siberia p. 137, *modestus* Sumatra p. 139, *minor* Texas p. 193, *brasiliensis* Brazil p. 201, *peruanus* Peru, *testaceus* Brazil, Argentina p. 202, *maculicollis* Argentina p. 205, **spp. n.**, ZIMMERMANN Ent. Bl. **20.**

Peltodytes dauricus Manchuria p. 8, *congoensis* Congo p. 10, *ovalis* Mexico p. 11, **spp. n.**, ID. t.c.

DYTISCIDAE.

Colymbetinae and Dytiscinae from the environs of Lwow, KLAPACZ Polsk. Pismo ent. **2** pp. 204–208.

Terminology of wing veins of Dytiscidae, OERTEL Zs. Morph. Oekol. **1** p. 793 figs.

Allopachria **gen. n.** (near *Desmopachria*) p. 194, *quadripustulatus* **sp. n.** Sumatra p. 195, ZIMMERMANN Ent. Mitt. **13.**

Coelambus salinarius Manitoba p. 105, *falli* Michigan p. 107, **spp. n.** fig., WALLIS Can. Ent. **56.**

Copelatus angolensis **sp. n.** Angola p. 142, PESCHET Bull. Mus. H. n. Paris **1924.**— *C. lividus, romani,* **spp. n.** Brazil p. 2, ZIMMERMANN Ark Zool. **16** no. 4.

Dytiscus marginalis, length of life and appearance of age in, p. 163, BLUNCK Zool. Anz. **58**; biology and morphology, pp. 1–863, 1–964, KORSCHELT Bearbeitung einheim. Tiere **1** & **2** 1924; circulatory system p. 75, KUHL Zool. Jahrb. Abt. Anat. **46**; legs and muscles of larva p. 43 fig., SPEYER Schr. physik. Ges. Königsberg **61–62** 1921; movements of oesophagus p. 598 figs., TEN CATE Arch. néerl. sci. Soc. Holl. **9.**

Gaurodytes philippensis, bakeri, **spp. n.** Philippines p. 743, ZIMMERMANN Phil. J. Sci. **24.**

Herophydrus rohani **sp. n.** Angola p. 140, PESCHET Bull. Mus. H. n. Paris **1924.**

Hydaticus schultzei **sp. n.** Philippines p. 744, ZIMMERMANN Phil. J. Sci. **24.**

Hydroporus (*Deronectes*) *duodecimpustulatus* **var. n.** *heeri* France p. 41, JACQUET Misc. ent. **28.**—*H. springeri* **sp. n.** Italy p. 72, MÜLLER Boll. Soc. ent. ital. **56.**

Hydrovatus reticulatus Java, Borneo, *semirufus* Sumatra, **spp. n.** p. 194, ZIMMERMANN Ent. Mitt. **13.**

Lancetes, revision pp. 89–99, *flavipes* Chile p. 92, *subseriatus* Falklands p. 95, *towianicus* Terra del Fuego, *immarginatus* Argentina p. 98 **spp. n.** *theresae* **var. n.** *strigipennis* Argentina, Patagonia p. 94, ZIMMERMANN Wiener ent. Ztg. **41**

Neptosternus corporaali **sp. n.** Sumatra p. 193, ZIMMERMANN Ent. Mitt. **13.**

Pseudhydrovatus **gen. n.** p. 140, *antennatus* **sp. n.** p. 141 Angola, PESCHET Bull. Mus. H. n. Paris **1924.**

Rhantus rohani **sp. n.** Angola p. 142, PESCHET Bull. Mus. H. n. Paris **1924.**

Thermonectes nobilis **sp. n.** Brazil p. 3, ZIMMERMANN Ark. Zool. **16** no. 4.

GYRINIDAE.

Revision and key to West Indian Gyrinidae, OCHS Amer. Mus. Novit. no. **125** p. 2.

Key to Philippine Gyrinidae, OCHS Phil. J. Sci. **24** p. 81.

Andogyrus **gen. n.** near *Gyrinus,* for S. American species placed by Régimbart in *Macrogyrus* p. 236, OCHS Ent. Bl. **20.**

Dineutus staudingeri E. Africa p. 234, *kuntzeni* Kamerun p. 243, **spp. n.,** OCHS Ent. Bl. **20.**—*D. carolinus* **subsp. n.** *mutchleri* Bahamas p. 3, *longimanus* **subsp. n.** *portoricensis* Porto Rico p. 5, OCHS Amer. Mus. Novit. no. **125.**

Gyretes villosomarginatus **sp. n.** Br. Guiana p. 8, OCHS Amer. Mus. Novit. no. **125.**

Gyrinus urinator **var. n.** *naxius* Naxos Island p. 73, MÜLLER Boll. Soc. ent. ital. **56.**

Macrogyrus, for S. American species see *Andogyrus.*

Orectochilus schultzei, bakeri **spp. n.** Philippines p. 85, OCHS Phil. J. Sci. **24.**

Orectogyrus addendus Sierra Leone p. 240, *escherichi* p. 241, *camerunensis* p. 242 Kamerun, **spp. n.,** OCHS Ent. Bl. **20.**

Paragyrinus **gen. n.** near *Gyrinus, sinensis* **sp. n.** China p. 231, OCHS Ent. Bl. **20.**

HYDROPHILIDAE.

Systematic notes on Helophorinae, D'ORCHYMONT Bull. Soc. ent. Belg. **6** p. **81.**

Amphiops sphaeroidalis **sp. n.** Zanzibar p. 23, KNISCH Wiener ent. Ztg. **41.**

Anacaena signaticollis **sp. n.** N. America p. 87, FALL J. N. Y. Ent. Soc. **32.**—*A. cordobana* **sp. n.** Argentina p. 122, KNISCH Wiener ent. Ztg. **41.**

Berosus guilielmi Sudan p. 24, *bruchianus* p. 126, *decolor* p. 129 Argentina, *hamatus* Brazil p. 131, *bermudanus* Bermuda p. 133, *paraguayanus* Paraguay p. 135, *rufulus* p. 135, *pauxillus* p. 136 Argentina, *arcanus* Bolivia p. 137 **spp. n.**, KNISCH t.c.

Cercyon opacellus p. 249, *connivens* p. 250, *californicus* p. 251, **spp. n.**, N. America, FALL Psyche **31**.—*C. nevadanus* **sp. n.** Nevada p. 55, KNISCH Ent. Anz. **4**.—*C. maritimus* S. Africa, *marshalli* E. Africa, **spp. n.** p. 18, *depressus* **subsp. n.** *uruguayanus* Uruguay p. 120, KNISCH Wiener ent. Ztg. **41**.—*C. knischi* **sp. n.** Italy, Dalmatia p. 77, MÜLLER Boll. Soc. ent. ital. **56**.

Chaetarthria almorana p. 39, *championi* p. 40, **spp. n.** India, KNISCH Wiener ent. Ztg. **41**.

Coelostoma dentatum **sp. n.** Uganda p. 17, KNISCH t.c.

Crenitis zimmermanni **sp. n.** S. Africa p. 19, KNISCH t.c.

Cymbiodyta vindicata p. 86, *acuminata* **spp. n.** N. America, *lacustris* Horn (nec Le Conte) a distinct sp. p. 87, FALL J. N.Y. Ent. Soc. **32** 1924.

Dactylosternum arrowi p. 116, *miraculum* p. 117 Costa Rica, *punctigerum* p. 118, *fryanum* p. 119 Brazil, **spp. n.**, KNISCH Wiener ent. Ztg. **41**.

Enochrus curialis **sp. n.** Carolina p. 56, KNISCH Ent. Anz. **4**.—*E. rubidus* E. Africa, *excisus* S. Africa p. 21, *icterus* N. India p. 38, *lampros* p. 124, *rufulus* p. 125 Brazil **spp. n.**, KNISCH Wiener ent. Ztg. **41**.

Helochares pauculus p. 36, *pygmaeus* p. 38 N. India, *rufinasus* Ecuador p. 124, **spp. n.**, KNISCH t.c.

Hemiosus bruchi **sp. n.** Argentina p. 139, KNISCH t.c.

Hydrochus bruchi **sp. n.** Argentina p. 115, KNISCH t.c.

Hydrocyclus rugosus **sp. n.** N. India p. 32, KNISCH t.c.

Hydrous piceus early stages p. 77, BROCHER Ann. Biol. lacustre **13**.—*H.* (*Hydrophilus*) *piceus* function of antennae p. 251, PRZIBRAM Zool. Anz. **60**.

Laccobius orientalis p. 33, *regalis* p. 34, *imperialis* p. 35, *patruelis* p. 36, **spp. n.** N. India, KNISCH Wiener ent. Ztg. **41**.

Limnebius almoranus p. 29, *singularis*, *distinctus* p. 31, **spp. n.** N. India, KNISCH t.c.

Limnoxenus sjöstedti **sp. n.** S. Africa p. 20, KNISCH t.c.

Ochthebius jensen-haarupi **sp. n.** Argentina p. 114, KNISCH t.c.—*O.* (*Cheilochthebius*) *gauthieri* p. 159, (*Dorochthebius*) *salinator* p. 160, **spp. n.** Tunisia DE PEYERIMHOFF Bull. Soc. ent. Fr. **1924**.—*O. montenegrinus* **subsp. n.** *ljutensis* Dalmatia p. 76, MÜLLER Boll. Soc. ent. ital. **56**.

Paracymus longulus, *alticola* p. 88, *seriellus* p. 89, **spp. n.** N. America, FALL J. N. Y. Ent. Soc. **32** 1924.

Pelosoma scotti **sp. n.** Dominica (W. Indies) p. 121, KNISCH Wiener ent. Ztg. **41**.

Philhydrus elongatulus, *blatchleyi*, **spp. n.** Florida p. 85; *ochraceus* Melsh. (=*lacustris* Le C.) p. 87, FALL J. New Y. Ent. Soc. **32**.

STAPHYLINIDAE.

Acylophorus ruficollis Motsch. in E. India, Ceylon, Queensland not E. Italy p. 344, WENDELER D. ent. Zs. **1924**.

Aleochara laevigata **var. n.** *lonae* Albania p. 41, GRIDELLI Boll. Soc. ent. ital. **56**.

Ancyrophorus monticola p. 174, *nitidus* p. 175, **spp. n.** India, CAMERON Trans. Ent. Soc. **1924**.

Bledius capra **subsp. n.** *seurati* Tunisia p. 158, DE PEYERIMHOFF Bull. Soc. ent. Fr. **1924**.

Coryphium, notes on Italian spp. pp. 129–134, *angusticolle* **subsp. n.** *italicus* Italy p. 132, GRIDELLI Boll. Soc. ent. ital. **56**.

Cryptobium capitalis, *bernhaueri* p. 196, *humerale* p. 197, **spp. n.** India, CAMERON Trans. Ent. Soc. **1924**.—*C. bernhaueri* **n. n.** for *sanguinicolle* Brnh. (Arch. Zool. **13** no. 8 1920 p. 14 nec *sanguinicolle* Brnh. Tijdschr. Ent. **1915** p. 226) p. 344, WENDELER D. ent. Zs. **1924**.

Delopsis tenuicornis **sp. n.** India p. 175, CAMERON Trans. Ent. Soc. **1924.**

Dianous robustus **sp. n.** India p. 179, CAMERON t.c.

Domene aeneipennis, indicum p. 191, *castaneipenne* p. 192, **spp. n.** India, CAMERON t.c.

Echinodes peninsularis **sp. n.** California p. 92, MANN Ann. Ent. Soc. Amer. **17.**

Euaesthetus bicoloratus **sp. n.** Florida p. 150, CASEY Mem. Col. **11.**

Euryusa myrmecophilous notes p. 217, key to European spp., synonymy p. 219, distribution p. 220 figs., DONISTHORPE Ent. Mo. Mag. **60.**

Gallardoia **gen. n.** p. 257, *argentina* **sp. n.** Argentina p. 258 fig., BRUCH Physis **7.**

Geodromicus championi p. 171, *coriaceus, recticollis* p. 172, *curvipes,* **spp. n.** India, key to Indian spp. p. 173, CAMERON Trans. Ent. Soc. **1924.**

Geostiba taediosa **sp. n.** Atlas Mts. p. 171, DE PEYERIMHOFF Bull. Soc. ent. Fr. **1924.**

Gyrohypnus davisi **sp. n.** New Jersey p. 72, NOTMAN J. N. Y. Ent. Soc. **32.**

Gyrophaena joyi **n. n.** for *convexicollis* Joy (nec Shp.), *eichelbaumi* **n. n.** for *dispar* Eichlb. (nec Er.) p. 344, WENDELER D. ent. Zs. **1924.**

Hetaerius hubbardi p. 93, *schwarzi* p. 94, **spp. n.** Arizona, MANN Ann. Ent. Soc. Amer. **17.**

Heterothops picipennis Fauv. (= *picipes* Fauv.), p. 344, WENDELER D. ent. Zs. **1924.**

Hygrogoeus cyanipennis **sp. n.** India p. 174, CAMERON Trans. Ent. Soc. **1924.**

Hypostenus coelogaster p. 159, *rufoplagiatus, paederinus* p. 160, **spp. n.** India, CHAMPION Ent. Mo. Mag. **60.**

Lathrimaeum monticola p. 169, *nigrum* p. 170, **spp. n.** India, CAMERON Trans. Ent. Soc. **1924.**

Lathrobium coecum in Hungary pp. 28–32, BOKOR Folia ent. hung. **1.**—*L. nigerrimum* p. 192, *triste, badium* p. 193, *cylindricolle* p. 194, **spp. n.** India, CAMERON Trans. Ent. Soc. **1924.**—*L. rufipenne* **f. n.** *henningsi* Brandenburg p. 155, NERESHEIMER & WAGNER D. ent. Zs. **1924.**

Leptusa apennina **sp. n.** Italy p. 4, HOLDHAUS Ann. N. H. Mus. Wien **37.**

Lesteva torrentum **sp. n.** India p. 171 CAMERON Trans. Ent. Soc. **1924.**

Leucitus pulcher **sp. n.** New Pommerania p. 341, WENDELER D. ent. Zs. **1924.**

Lispinus quadricollis p. 160, *beesoni* p. 161, **spp. n.** India, CAMERON Trans. Ent. Soc. **1924.**

Mannerheimia aprutiana p. 136 *doderoi* p. 137, **spp. n.** Italy, GRIDELLI Boll. Soc. ent. ital. **56.**

Medon parkeri p. 183, *castaneipenne, umbilicatus* p. 184, *niger, beesoni* p. 185, *asperulus, rufoferrugineus* p. 186, *dolorosus, exasperatus* p. 187, *chatterjeei* p. 188, **spp. n.** India, CAMERON Trans. Ent. Soc. **1924.**

Megarthrus chatterjeei p. 162, *trisinuatus* p. 163, *flavolimbatus, alticola* p. 164, **spp. n.** India, key to Indian spp. p. 165, CAMERON t.c.

Neoleucitus **gen. n.** p. 341, *rugosus* **sp. n.** p. 342 Luzon, WENDELER D. ent. Zs. **1924.**

Neosclerus **gen. n.** p. 188, *fortepunctatus* p. 189, *granulicollis, frater* p. 190, **spp. n.** India, CAMERON Trans. Ent. Soc. **1924.**

Niphetodes, indigenous forms in Poland pp. 100–102, KINEL Polsk. Pismo ent. **3.**

Oedichirus elegans **sp. n.** India p. 180, CAMERON Trans. Ent. Soc. **1924.**

Omalium beesoni p. 166, *humerale, secretum, cariosum* p. 167, **spp. n.** India, CAMERON t.c.

Onychophilonthus **subgen. n.** see *Philonthus.*

Osorius granulifrons **sp. n.** India p. 178, CAMERON Trans. Ent. Soc. **1924.**

Oxyporus flavicornis **var. n.** *nigriceps* India p. 178, CAMERON t.c.

Paederus nigripennis **sp. n.** India p. 180, CAMERON t.c.—*P. ruficollis* **var. n.** *ater* Caucasus p. 65, EICHLER Polsk. Pismo. ent. **3.**

Palaminus morosus **sp. n.** India p. 179, CAMERON Trans. Ent. Soc. **1924.**

Paraleptusa priscilla **sp. n.** Atlas Mts. p. 172, DE PEYERIMHOFF Bull. Soc. ent. Fr. **1924.**

Philonthus annandalei, kempi **spp. n.** Assam p. 118, CAMERON Rec. Ind. Mus. **26.**—*P. coerulescens* ethology and dispersion pp. 23–24, DEVILLE Bull. Soc. ent. Fr. **1924.**—*P.* (*Onychophilonthus* **subgen. n.**) for *marginatus* Stroem. p. 156, NERESHEIMER & WAGNER D.E.Z. **1924.**—*P. moldavicus* **sp. n.** Rumania p. 343, WENDELER t.c.

Phloeocharis recidiva **sp. n.** Atlas Mts. p. 171, DE PEYERIMHOFF Bull. Soc. ent. Fr. **1924.**

Phloeonomus opacus, subopacus p. 168, *morosus,* **spp. n.** India, key to Indian spp. p. 169, CAMERON Trans. Ent. Soc. **1924.**

Phyllodrepa himalayica **sp. n.** India p. 166, CAMERON t.c.

Priochirus boettcheri **sp. n.** Philippines p. 340, WENDELER D. ent. Zs. **1924.**

Proteinus ruficollis, fuscotestaceus **spp. n.** India p. 162, CAMERON Trans. Ent. Soc. **1924.**

Pseudobium semiflavum, assimile **spp. n.** India p. 195, CAMERON t.c.

Psiloscelis abnormalis **sp. n.** N. Dakota p. 91, MANN Ann. Ent. Soc. Amer. **17.**

Pulicomorpha **gen. n.** p. 87, *coecum* **sp. n.** California p. 88 fig., MANN t.c.

Quedius, descriptions of palaearctic pp. 5–112, *andreinii* p. 30, *invreae* p. 47, *latialis* p. 66, *solarii* p. 103, **spp. n.** Italy, *fulgidus* **var. n.** *balianii* p. 45 Italy, *milleri* **n. n.** for *robustus* auct. nec Scriba p. 104, GRIDELLI Mem. Soc. ent. ital. **3.**—*Q. cincticollis* **var. n.** *carpaticola* Carpathians p. 245, ROUBAL Ent. Bl. **20.**

Scotonomus solarii **sp. n.** Italy p. 5, HOLDHAUS Ann. N. H. Mus. Wien **37.**

Sipalia alpicola **var. n.** *ravasinii* Albania p. 39, DODERO in GRIDELLI, Boll. Soc. ent. ital. **56.**—*S. ruthena* **sp. n.** Carpathians p. 247, ROUBAL Ent. Bl. **20.**

Staphylinus notes pp. 19–27, key to species (*Goserius*) p. 24, *gridellii* p. 19 Crimea, Macedonia, *pedemontanus* p. 20 Italy, *pyrenaeus* p. 21 Pyrenees, *depolii* p. 23 Fiume hinterland, **spp. n.,** MÜLLER Boll. Soc. ent. ital. **56.**—*S. quadraticeps, triplicans* p. 149, **spp. n.** N. America, CASEY Mem. Col. **11.**

Stenus paululus p. 251, *aureosetulus* p. 252, *friebi* p. 256, **spp. n.** Siberia, BENICK D. ent. Zs. **1924.**—*S. formosae* **n. n.** for *submarginatus* Brnh. (Arch. Natg. **88** Abt. A. 1922 p. 227 nec *submarginatus* Brnh. Ent. Bl. **8** p. 169) p. 344, WENDELER D. ent. Zs. **1924.**

Stilicopsis dorsolineata **sp. n.** India p. 181, CAMERON Trans. Ent. Soc. **1924.**

Stilicus plagiatus p. 181, *praelongus* p. 182, *lithocharoides* p. 183, **spp. n.** India, CAMERON Trans. Ent. Soc. **1924.**

Tetrapleurus himalayicus **sp. n.** India p. 161, CAMERON t.c.

Thinobius himalayicus p. 176, *antennarius, pruinosus* p. 177, **spp. n.** India, CAMERON t.c.

Trogophloeus weissi **sp. n.** N.J. p. 71, NOTMAN J. N. Y. Ent. Soc. **32.**

Velleopsis marginiventris in Bulgaria p. 148, MARKOVITCH Trav. Soc. bulg. Sci. nat. **8** 1915.

Xantholinus istriensis **sp. n.** Istria p. 40, RAMBOUSEK Casopis **21.**—*X. lineatus* **n. n.** for *linearis* Blatch. (nec Oliv.) p. 344, WENDELER D. ent. Zs. **1924.**

SILPHIDAE.

Agyrtes castaneus **ab. n.** *unicolor* Russia p. 80, ROUBAL Ent. Anz. **4.**

Bathyscia corsica Ab. distinct from *wollastoni* Jans. p. 28, HOLDHAUS Ann. N. H. Mus. Wien **37.**

Bathysciola pumilio **subsp. n.** *biglianii* p. 49, *sarteanensis* **subsp. n.** *paganettii, ferdinandi* p. 50, *angeli* p. 52, **spp. n.,** *solarii* **subsp. n.** *aemiliana, muscorum* synonym of *Parabathyscia wollastoni* p. 54 Italy (fig.), JEANNEL Boll. Soc. ent. ital. **56.**

Ceuthmonocharis heteromorphus, anatomical details p. 59, *doderoi* **sp. n.** p. 61 Italy fig., JEANNEL Boll. Soc. ent. ital. **56.**

Cyrtusa rotundata **sp. n.** India p. 162, CHAMPION Ent. Mo. Mag. **60.**

Eocatops **gen. n.** *ambiguus* **sp. n.** Cyrenaica p. 63, DE PEYERIMHOFF Boll. Soc. ent. ital. **56.**

Hydnobius contractus ♂ described India p. 161, CHAMPION Ent. Mo. Mag. **60.**

Necrophorus interruptus **ab. n.** *obscureciliatus* Russia p. 80, ROUBAL Ent. Anz. **4.**—*N. vespillo* **ab. n.** *aethiops* Germany p. 57, SCHLEICHER Ent. Bl. **20.**

Neobathyscia fabianii **subsp. n.** *mancinii* p. 58 Italy, JEANNEL Boll. Soc. ent. ital. **56.**

Netolitzkya maneki **subsp. n.** *jeanneli* Bulgaria p. 160, BURESCH Trav. Soc. bulg. Sci. nat. **11.**

Parabathyscia wollastoni (=*Bathysciola muscorum*) p. 54, *apuana* p. 55 (with **subsp. n.** *avetonensis*), *florentina* **spp. n.** p. 57 Italy fig., JEANNEL Boll. Soc. ent. ital. **56.**

Pseudocolenis hemisphaerica p. 162, *variicornis, disparilis* p. 163, **spp. n.** India fig., CHAMPION Ent. Mo. Mag. **60.**

Xylodrepa quadripunctata, notes on, Madrid p. 352, ESCALERA Bol. R. Soc. esp. H. nat. **24.**

PLATYPSYLLIDAE.

Platypsyllus castoris biology p. 83 figs., BUGNION & DU BUYSSON Ann. Sci. nat. Zool. **7.**

LEPTINIDAE.

Silphopsyllus desmanae, description repeated p. 95, notes on, p. 96, OLSOUFIEFF Bull. Soc. ent. Fr. **1924.**

LIODIDAE.

Agathidium maculicolle **sp. n.** India p. 161, CHAMPION Ent. Mo. Mag. **60.**—*A. mandibulare* **ab. n.** *corallinum* Poland p. 21, TRELLA Polsk. Pismo ent. **3.**

Anisotoma humeralis **ab. n.** *corticina* Poland p. 21, TRELLA t.c.

TRICHOPTERYGIDAE.

Cylindrosella **gen. n.** *dampfi* **sp. n.** Mexico p. 172 fig., BARBER Proc. Ent. Soc. Wash. **26.**

Dilinium **gen. n.** *rhodeanum* **sp. n.** Rhode Island p. 151, CASEY Mem. Col. **11.**

Limulodes elongatus **sp. n.** Argentina p. 229 fig., BRUCH Physis **7.**

Mycophagus (?) *robustus* Mexico, *panamensis* Panama **spp. n.** p. 174 fig., BARBER Proc. Ent. Soc. Wash. **26.**

Nanosella matthewsi **n. n.** for *fungi* Matthews nec Lec. p. 172, BARBER Proc. Ent. Soc. Wash. **26.**

Nanosellinae, **subfam. n.** key p. 170, BARBER t.c.

Nephanes puritanus, vicksburgensis **spp. n.** U.S.A. p. 152, CASEY Mem. Col. **11.**

Ptenidium parvulum **sp. n.** Mississippi p. 152, CASEY t.c.

Ptiliodina **gen. n.** *ochracea* **sp. n.** Rhode Is. p. 153, CASEY t.c.

Ptiliopycna **gen. n.** p. 153, *quadrata* **sp. n.** Michigan p. 154, CASEY t.c.

Ptilium austinianum, curticolle p. 154, *shastanum, franciscanum* p. 155, **spp. n.** U.S.A., CASEY t.c.

Throsciptilium duryi **sp. n.** Ohio p. 175 fig., BARBER Proc. Ent. Soc. Wash. **26.**

SCAPHIDIIDAE.

Revision of the Scaphidiidae of Japan with keys, ACHARD Fragm. ent. **1923** pp. 94–120.

New subdivision of Scaphidiidae, ACHARD Ann. Soc. ent Belg. **64** pp. 25–31.

Catalogue of Palaearctic Scaphidiidae, ACHARD Bull. Soc. ent. Belg. **6** pp. 143–155.

Amalocera paulistana **sp. n.** Brazil p. 42, ACHARD Fragm. ent. **1922.**

Baeocera curtula **sp. n.** Japan p. 117, ACHARD op. cit. **1923.**

Cyparium ruficolle p. 39, *pygidiale* Brazil, *humerale* Bolivia p. 40, *plagipenne, montanum* India p. 41, *bowringi* Java p. 42, *mikado* Japan p. 109, **spp. n.,** ACHARD op. cit. **1922** & **1923.**

Euscaphidium **gen. n.** genotype *Scaphidium tuberosum* Achard, p. 12, ACHARD op. cit. **1922.**

Hemiscaphium **gen. n.** for *Scaphidium striatipenne* Gestro p. 12, key p. 30, *discerptum* **sp. n.** Sumatra p. 33, *striatipenne* **var. n.** *ornatipenne* Java, *shelfordi* Borneo p. 34, *brunneopictum* Burma p. 35, **spp. n.**, ACHARD op. cit. **1922.**

Hyposcaphidium **subgen. n.** see *Scaphidium.*

Isoscaphidium **subgen. n.** see *Scaphidium.*

Lepteroscapha antennalis **sp. n.** Fernando Po p. 44, ACHARD op. cit. **1922.**

Pachyscaphidium **subgen. n.** see *Scaphidium.*

Parascaphium **gen. n.** for *Scaphium optabile*, Lewis p. 97, ACHARD op. cit. **1923.**

Phenoscaphium **gen. n.** p. 35, *callosipenne* **sp. n.** Borneo p. 36, ACHARD op. cit. **1922.**

Pseudobironium lewisi **sp. n.** Japan p. 118, ACHARD op. cit. **1923.**

Scaphidiolum **gen. n.** for *Scaphidium basale*, Cast. p. 12, *dureli* p. 37, *andrewesi* (with **var. n.** *femoratum*) p. 38 India, *lewisi* Japan p. 108, **spp. n.**, ACHARD Fragm. ent. **1922** & **1923.**—*S. disclusum* Java p. 150, *hexaspilotum* Ceylon, *luzonicum* Philippines p. 152, **spp. n.**, ACHARD Bull. Soc. ent. Fr. **1924.**

Scaphidium key to allied genera p. 10 (*Isoscaphidium, Hyposcaphidium, Pachyscaphidium* **subgenn. n.**), *pardale* Cast. see *Scaphidopsis, striatipenne* Gestro see *Hemiscaphium, basale* Cast. see *Scaphidiolum* p. 12, *insulare* **sp. n.** Japan p. 38, ACHARD Fragm. ent. **1922.**

Scaphidopsis **gen. n.** for *Scaphidium pardale* Cast. p. 12, ACHARD op. cit. **1922.**

Scaphium optabile Lewis see *Parascaphium.*

Scaphosoma key to Japanese p. 110, *haemorrhoidale* **var. n.** *plagipenne, lewisi, ustulatum* p. 112, *unicolor* p. 113, *galloisi, harmandi* p. 114, *crassipes rufum* p. 115, *micros, myrmidon* p. 116, **spp. n.**, Japan, ACHARD Fragm. ent. **1923.**

Toxidium sternale, ornatipenne p. 43, *variegatum* p. 44 Bolivia, key p. 118, *aberrans* Japan p. 119 **spp. n.**, ACHARD op. cit. **1922** & **1923.**

PSELAPHIDAE.

Adranes angustus **sp. n.** Missouri p. 150, CASEY Mem. Col. **11.**

Amaurops diecki Saulcy, key to allies p. 10, HOLDHAUS Ann. N. H. Mus. Wien **37.**

Batrisodes delaportei, adnexus in ants' nests in Britain p. 117, DONISTHORPE Ent. Rec. **36.**—*B. venustus*, larval biology pp. 374–376, ROSENBERG Ent. Medd. **14.**

Bythinus apuanus **sp. n.** Italy p. 1 fig., RASETTI Boll. Soc. ent. ital. **56.**—*B. simplex* a subspecies of *crassicornis* pp. (64)–(69) fig., *monstrosetibialis* **sp. n.** Hungary pp. (71)–(72), STOLZ Verh. zool.-bot. Ges. Wien **73.**

Euplectus decipiens Raffr. further description pp. 150–151, DONISTHORPE Ent. Rec. **36.**

Metopiosoma barretoi **sp. n.** Argentina p. 228 fig., BRUCH Physis **7.**

Pselaphus ganglbaueri, conosternum, key to allies p. 12, HOLDHAUS Ann. N. H. Mus. Wien **37.**

Saulcyella schmidti, habits pp. 119–122, DORN Ent. Jahrb. **33–34.**

Trogaster, key p. 7, HOLDHAUS Ann. N. H. Mus. Wien **37.**

HISTERIDAE.

Histeridae in nests of ants and termites S. America, REICHENSPERGER Rev. suisse Zool. **31** pp. 117–153 figs.

Victorian myrmecophilous Chlamydopsini, bionomics and other notes, OKE Vict. Nat. **40** 1923 pp. 152–162.

Ammostyphrus **gen. n.** near *Pachylopus* p. 164, *cerberus* **sp. n.** Turkestan p. 165 fig., REICHARDT Ent. Bl. **20.**

Atholus liopygoformis **sp. n.** Java p. 115, DESBORDES Bull. Soc. ent. Fr. **1924.**

Ceratohister **gen. n.** near *Orectoscelis* p. 302, *pheidoliphilus* **sp. n.** India p. 303, fig., REICHENSPERGER Ent. Mitt. **13.**

Cheilister **gen. n.** p. 147, *lucidulus* **sp. n.** Brazil p. 148 fig., REICHENSPERGER Rev. suisse Zool. **31.**

Chlamydopsis pygidialis **var. n.** *minor*; *ectatommae* **var. n.** *rufomaculatus* p. 153; *setipennis* p. 154, *leai* p. 155, *puncticollis* p. 156, *strigicollis* p. 157, *sculptus* p. 158, **spp. n.** Victoria, OKE Vict. Nat. **40** 1923.

Cylistix parvula p. 198, *deficiens* p. 199, **spp. n.** N. America, CASEY Mem. Col. **11.**

Epierus coomani **sp. n.** Tonkin p. 141, DESBORDES Bull. Soc. ent. Fr. **1924.**

Hetaerius orbiculatus **sp. n.** Pennsylvania p. 199, CASEY Mem. Col. **11.**

Hister albertanus p. 196, *maneei, debilicinus* p. 197, *coloradensis* p. 198, **spp. n.** N. America, CASEY t.c.—*H. parumstriatus* **sp. n.** Belgian Congo p. 243, DESBORDES Rev. zool. afr. **12.**—*H. 4-maculatus* **abb. n.** *pozuelicus, incognitus* Ciudad Real p. 203, FUENTE Bol. Soc. esp. H. n. **24.**—*H. semenovi* **sp. n.** Turkestan p. 162 fig., REICHARDT Ent. Bl. **20.**—*H. 4-maculatus* **ab. n.** *longimaculatus* p. 57, *sinuatus* **ab. n.** *heyrovskýi* p. 58 Bohemia, SCHLEICHER Ent. Bl. **20.**

Hypocacculus congocola **sp. n.** Belgian Congo p. 252, DESBORDES Rev. zool. afr. **12.**

Hypocaccus striolifer **sp. n.** California p. 116, DESBORDES Bull. Soc. ent. Fr. **1924.**

Lioderma silvestre **sp. n.** Colombia p. 122, DESBORDES Bull. Soc. ent. Fr. **1924.**

Orectoscelis bifovaecollis **sp. n.** Victoria p. 159, OKE Vict. Nat. **40** 1923.

Pachycraerus posticepunctatus **sp. n.** Belgian Congo p. 251, DESBORDES Rev. zool. afr. **12.**

Parepitoxus **gen. n.** (near *Tribalus*) *lacustris* **sp. n.** Belgian Congo p. 246, DESBORDES t.c.

Psalidister **gen. n.** *quadriglumis* p. 144, *burchelli* p. 146, *foveatus, carinulatus* p. 147 **spp. n.** S. America fig., REICHENSPERGER Rev. suisse Zool. **31.**—*P. furcatus* **sp. n.** Brazil p. 306 fig., REICHENSPERGER Ent. Mitt. **13.**

Pseudister watsensis **sp. n.** Belgian Congo p. 242, DESBORDES Rev. zool. afr. **12.**

Pygocoelis congonis **sp. n.** Belgian Congo p. 241, DESBORDES t.c.

Saprinus shantzi, smithi p. 200, *subtropicus, pinorum* p. 201, *carolinae, micros, nanulus* p. 202, *mormonellus, brevicollis* p. 203, *recticollis, diego* p. 204, *obsolescens, rubidulus, densus* p. 205, *ludovicianus* p. 206, **spp. n.** N. America, CASEY Mem. Col. **11.**—*S. maculatus* **ab. n.** *inornatus* Caucasus p. 37, SCHLEICHER Ent. Anz. **4.**

Synetister **gen. n.** *pilosus* **sp. n.** Brazil p. 142 fig., REICHENSPERGER Rev. suisse Zool. **31.**

Synodites sodalis p. 209, *splendens* p. 211, (*Synoditulus* **subgen. n.**) *separatus* p. 212 **spp. n.** Parana fig., REICHENSPERGER Zool. Anz. **60.**

Synoditulus **subgen. n.** see *Synodites.*

Teretrius schoutedeni **sp. n.** Belgian Congo p. 240, DESBORDES Rev. zool. afr. **12.**

Xenosternus schoutedeni p. 247, *kasaicola* p. 248, *robustus* p. 249, **spp. n.** Belgian Congo, key p. 250, DESBORDES t.c.

Zabromorphus tinantae **sp. n.** Belgian Congo p. 244, DESBORDES t.c.

CYPHONIDAE (HELODIDAE).

Curtoscirtes **subgen. n.** see *Scirtes.*

Cyphon insularius p. 296, *circumductus* p. 297, *mahensis, biperforatus* **spp. n.** p. 298 Seychelles, CHAMPION Trans. Ent. Soc. **1923.**—*C. kongsbergensis* **sp. n.** Norway p. 292, MUNSTER Norsk ent. Tidsskr. **1.**—*C. luteomaculatus* **sp. n.** B. E. Afr. p. 5, PIC Voy. Babault Afr. or. angl. **1921.**

Eubria minima **sp. n.** Kumaon p. 250, CHAMPION Ann. Mag. N. H. (9) **13.**

Ora irregularis **varr. n.** *innotatithorax, notatithorax* Philippines p. 5, PIC hors-texte Échange **39.**

Prionocyphon limbatus biology p. 79, figs., GOOD J. N. Y. Ent. Soc. **32.**

Psephenoides volatilis **sp. n.** Kumaon p. 251 figs., CHAMPION Ann. Mag. N. H. (9) **13.**

Ptilodactyla scabrosa **sp. n.** Seychelles p. 300, CHAMPION Trans. Ent. Soc. **1923.**—*P. strangulata* **sp. n.** Sumatra p. 29, PIC Tijd. Ent. **67.**—*P. sapitensis* Lombok, *toliana* Celebes, *discoidalis,*

subovata p. 6, *brunneomarginata*, *rufosuturalis*, *reducta*, *pauli* (with **var. n.** *juncta*), *wagneri*, *modesta*, *dentaticornis*, *castaneonotata*, S. America, *inlateralis*, Sumatra, *bruneiensis* Borneo p. 7, *pallidomarginata* Java, *minima* New Guinea, *roonensis*, *impressa*, *modiglianii* Malay Arch., *subdepressa*, *subelongata* Malacca, *favrei*, *calcuttana* India p. 8, **spp. n.**, Pic hors-texte Échange **39.**

Scirtes ovalis, *piceolus* **spp. n.** Florida p. 166, Blatchley Can. Ent. **56.**—*S. seychellensis* **sp. n.** Seychelles p. 299, Champion Trans. Ent. Soc. **1923.**—*S. subparallelus*, *bakeri*, *semiexplanatus*, *bisbinotatus* p. 5 Philippines, *singaporensis* Singapore, *diversipennis*, *sandakanus*, *subapicalis* Borneo p. 6, (*Curtoscirtes* **subgen. n.**) *coccinelloides*, *circulifer* **spp. n.**, *borneensis* **var. n.** *luzonicus* Philippines p. 5, Pic hors-texte Échange **39.**

Scydmaenidae.

Cephennium, key to subgenera p. 18, *romanum* p. 20, *pallidulum*, *cyclonotum* fig. p. 21 **spp. n.** Italy, key to Italian species of subgen. *Cephennarium* p. 23, Holdhaus Ann. N. H. Mus. Wien **37.**

Euconnus velebiticus **sp. n.** Croatia p. 74, Müller Boll. Soc. ent. ital. **56.**—*E. denticornis* **ab. n.** *uredineus* Poland p. 19, Trella Polsk. Pismo ent. **3.**

Neuraphes ocularis **sp. n.** Italy p. 28, Holdhaus Ann. N. H. Mus. Wien **37.**

Nitidulidae.

Nitidulidae: Cat. Indian Insects Pt. 5, Chatterjee Calcutta Govt. India Central Pubn. Br. **1924** 40 pp.

Anister raffrayi notes p. 82 fig., Alfieri Bull. Soc. R. ent. Egypte **1924.**

Epuraea bohemani **n.n.** for *bisignata* Boh. (nec Sturm) p. 232, Plavilstshikov Ann. Mag. N. H. (9) **13.**

Meligethes, notes on Danish spp. pp. 339–373, Hansen Ent. Medd. **14.**—*M. edmundi* **n. n.** for *confusus* Reitt. (nec Bris.), *grouvellei* **n.n.** for *minimus* Grouv. (nec Rey), *coeruleovirens* var. *seidlitzi* **n.n.** for var. *anthracinus* Seidl. (nec Bris.) p. 232, Plavilstshikov Ann. Mag. N. H. (9) **13.**

Trogositidae (Ostomidae).

Leperina sobrina larva described p. 341 fig., Hudson Trans. N. Z. Inst. **55.**

Nemosoma elongatum **ab. n.** *unicolor* Prussia p. 232, Plavilstshikov Ann. Mag. N. H. (9) **13.**

Ostoma columbiana **sp. n.** Br. Columbia p. 186, Casey Mem. Col. **11.**

Colydiidae.

Bitoma trinotata, *sobrina* **spp. n.** U.S.A. p. 182, Casey Mem. Col. **11.**

Bothrideres arizonicus **sp. n.** Arizona p. 181, Casey t.c.

Endeitoma floridana **sp. n.** Florida p. 183, Casey t.c.

Cucujidae.

Cryptamorpha brevicornis larva described p. 341 fig., Hudson Trans. N.Z. Inst. **55.**

Europs alutacea **sp. n.** India p. 168, Champion Ent. Mo. Mag. **60.**

Cryptophagidae.

Antherophagus oregonus **sp. n.** Oregon p. 189, Casey Mem. Col. **11.**

Atomaria ebenina p. 194, *nebulosa* p. 195, **spp. n.** New York, Casey t.c.

Cryptophagus boulderanus, *rupimontis*, *densicollis* p. 190, *keeni*, *contractus*, *vestigialis* p. 191, *grossulus*, *angustatus* p. 192, *mainensis*, *prominens*, *restrictus* p. 193, **spp. n.** N. America, Casey t.c.—*C. clavator* **sp. n.** India p. 166 fig., Champion Ent. Mo. Mag. **60.**—*C.* (*Mnionomus*) *bohemicus* **sp. n.** Czecho-Slovakia p. 23, Roubal Casopis **21.**

Cryptophilus fluminalis p. 188, *seriatus* p. 189, **spp. n.** U.S.A., Casey Mem. Col. **11.**

Ephisternus perminutus **sp. n.** N. Carolina p. 195, Casey t.c.

Macrodea **gen. n.** *antennalis* **sp. n.** Canada p. 194, Casey t.c.

Mimemodes megalocephalus **sp. n.** India p. 169, Champion Ent. Mo. Mag. **60.**

Parephistemus **gen. n.** *ocularis* **sp. n.** N. Carolina p. 196, Casey Mem. Col. **11.**

Tomarus quadrinotatus p. 187, *ventricosus* p. 188, **spp. n.** N. Carolina, CASEY t.c.

Trogocryptoides **gen. n.** *brachyderus* **sp. n.** India p. 167 figs., CHAMPION Ent. Mo. Mag. **60.**

BYTURIDAE.

Byturus aestivus var. *fleischeri* **n. n.** for *grisescens* Fleisch. (nec Jaune) p. 232, PLAVILSTSHIKOV Ann. Mag. N.H. (9) **13.**

LANGURIIDAE.

Callilanguria ruficeps **sp. n.** Philippines p. 93, ACHARD Fragm. ent. **1923.**

Languria erythrocephalus **sp. n.** Florida, p. 167, BLATCHLEY Can. Ent. **56.**—*L. apiciventris* **sp. n.** Colorado p. 177, CASEY Mem. Col. **11.**

EROTYLIDAE.

Aulacochilus grouvellei **sp. n.**, *decoratus* **var. n.** *maculithorax*, *taliensis* p. 48, *egregius* **spp. n.**, Indo-China, *quadripustulatus* **var. n.** *andamanus* Andaman Is. p. 49, *sumbawanus* Sumbawa, *ater* Tonkin **spp. n.** p. 50, *stolzi* **var. n.** *conjungens* Sumatra p. 51, ACHARD Fragm. ent. **1922** & **1923.**

Dacne bipustulata, biology pp. 83–89 fig., LAMPRECHT Ent. Tidsk. **45.**

Triplax coloradana p. 179, *carri*, *frosti* p. 180, **spp. n.** N. America, CASEY t.c.

Tritoma pallens, *pinorum*, *evanescens* **spp. n.** N. America p. 178, CASEY t.c.

ENDOMYCHIDAE.

Aclemmysa algirica **sp. n.** Algeria p. 139, CAPRA Boll. Soc. ent. ital. **56.**

Engonius laticollis, *effractus* **spp. n.** Indo-China p. 28, ACHARD Fragm. ent. **1922.**

Parindalmus **gen. n.** *tonkineus* **sp. n.** Tonkin p. 29, ACHARD t.c.

Stenotarsus lateniger, *madecassus* **spp. n.** Madagascar p. 2, PIC Mél. exot. ent. **41.**

Trochoideus termitophilus, biology p. 185 fig., KEMNER Tijd. Ent. **67.**

COCCINELLIDAE.

Female genitalia of Coccinellidae, DOBRZHANSKY Ent. Mitt. **13** p. 18; also Zs. wiss. Insektenbiol. **19** pp. 98–100.

Revision of European Scymnini, MADER Bestimmungs-Tabellen europäischen Coleopteren Heft **94** pp. 1–48.

Adalia 10-punctata **ab. n.** *lemani* Belgium p. 156, LESTAGE Ent. Rec. **36.**

Adonia variegata **ab. n.** *bonaerti* Belgium p. 155, LESTAGE t.c.

Anisocalvia quatuordecimguttata **ff. n.** *lacustris* p. 158, *bicordifera*, *vancouveri*, *quadrisignata*, *postplagiata* p. 159, *uniformis* p. 160 N. America, CASEY Mem. Col. **11.**

Anisosticta 19-punctata **abb. n.** *trijuncta*, *riparia*, *campiniensis*, *averbodensis* p. 155, *simplex*, *frenneti*, *sinuata*, *woluwensis*, *juncorum*, *schoutedeni*, *rubiclaustri* p. 156 Belgium, LESTAGE Ent. Rec. **36.**

Arrowella **gen. n.** p. 147, *porteri* **sp. n.** Chile p. 148, BRÈTHES An. Mus. Nac. H. n. B. Aires **33.**

Brachyacantha bahiensis p. 159, *simillima* p. 160, **spp. n.** Brazil, BRÈTHES t.c.

Caria forsslundi **sp. n.** Kamerun p. 129, ÁLINDER Mitt. münchn. ent. Ges. **14.**

Cleis picta **subsp. n.** *nubilata* Mexico p. 158, CASEY Mem. Col. **11.**

Cleothera januarii **sp. n.** Brazil p. 161, BRÈTHES An. Mus. Nac. H. n. B. Aires **33.**

Chilocorus bipustulatus **var. n.** *meridionalis* Caucasus p. 66, EICHLER Polsk. Pismo ent. **3.**

Coccinella sicardi **n. n.** for *areata* Muls. nec Panz. (=*boliviana* Ws. nec Muls.) p. 152, *fernandeziana* Ph. Germ. to *Eriopis opposita* Guér. p. 148, BRÈTHES An. Mus. Nac. H. n. B. Aires **33.**—*C. 11-punctata* **ab. n.** *lemani* Cumberland p. 87, MARRINER Ent. Rec. **36**

Curinus coeruleus immature stages p. 371, FULLAWAY Proc. Hawaiian Ent. Soc. **5.**

Delphastobia **gen. n.** *mexicana* **sp. n.** Mexico p. 171, CASEY Mem. Col. **11.**

Delphastopsis gen. n. *amazonica* sp. n. Brazil p. 170, CASEY t.c.

Delphastus subtropicus Florida, *violaceus* Cuba, spp. n. p. 170, CASEY t.c.

Diomus marchali Chile, *brasiliensis* p. 162, *janeirensis* p. 163, *prothoracicus* p. 164, *brasilicola*, *effusus* p. 165, *genialis* p. 166 Brazil, spp. n. figs., BRÈTHES An. Mus. Nac. H. n. B. Aires 33.

Eriopis opposita (Guér.) Muls. (= *Coccinella fernandeziana* Ph. Germ.) p. 148, *16-pustulata* var. *marginicollis* Weise (= var. *porteri* Brèthes) p. 149, *16-p.* varr. n. *nigra*, *cruciata*, figs. Patagonia p. 150, key p. 151, BRÈTHES t.c.

Exochomus marginipennis var. n. *ixtlensis* Mexico p. 161, CASEY Mem. Col. 11.—*E. quadripustulatus* ab. n. *sicardi* France p. 84, MÉQUIGNON Bull. Soc. ent. Fr. 1924.

Harmonia axyridis geographical and individual variation p. 401 figs., DOBRZHANSKY Biol. Zentralbl. 44.

Heterodiomus gen. n., *darwini* Brazil p. 155, *tetraspilotus* Uruguay p. 156 spp. n. fig., BRÈTHES An. Mus. Nac. H. n. B. Aires 33.

Hippodamia convergens subsp. n. *pugetana*; *uteana* subsp. n. *quadraria*; *americana* subsp. n. *fontinalis* p. 156; *sinuata* subsp. n. *alberta* p. 157 N. America, CASEY Mem. Col. 11.—*H. tredecimpunctata* bionomics pp. 188–192, CUTRIGHT Ann. Ent. Soc. Amer. 17.—*H. variegata* ab. n. *arcuata*, ab. *triangularis* n.n. for *maculigera* Leman (nec Weise) p. 1, LEMAN Ent. Rec. 36. —*H. 13-punctata* abb. n. *tonnoiri*, *beffai*, *guilleaumei*; *7-maculata* abb. n. *scutellata*, *trifasciata*, *bifasciata*, *bioculata* p. 155 Belgium, LESTAGE Ent. Rec. 36.

Hyperaspidius flavocephalus sp. n. Florida p. 167, BLATCHLEY Can. Ent. 56.—*H. brevilinea* p. 168, *mimus*, *pallidus* p. 169, spp. n. N. America, CASEY Mem. Col. 11.

Hyperaspis nigropennis sp. n. Florida p. 167, BLATCHLEY Can. Ent. 56.—*H. tuckeri*, *uniformis*, *pinorum*, p. 162, *conviva*, *maneei*, *triplicans* (with subsp. n. *microsticta*) p. 163, *carolina*, *insolens* p. 164, *binaria*, *invertens*, *separata* p. 165, *balsasia*, *nubilatus*, *asphaltina* p. 166, *sexualis*, *durangoensis* p. 167, *disjunctus* p. 168, spp. n. N. America, CASEY Mem. Col. 11.—*H. silvestrii* immature stages p. 373, FULLAWAY Proc. Hawaiian Ent. Soc. 5.

Neoharmonia venusta f. n. *centralis* U.S.A. p. 157, CASEY Mem. Col. 11.

Neomysia oregona sp. n. Oregon p. 160, CASEY t.c.

Nephopullus gen. n. *sicardi* Chile p. 167, *darwini* Uruguay p. 168, spp. n., BRÈTHES An. Mus. Nac. H. n. B. Aires 33.

Nothorhyzobius gen. n. *ruficollis* sp. n. Argentina p. 173 fig., BRÈTHES t.c.

Olla abdominalis subsp. n. *arizonae* Arizona p. 158, CASEY Mem. Col. 11.

Orynipus gen. n. *darwini* sp. n. Chile p. 158, BRÈTHES An. Mus. Nac. H. n. B. Aires 33.

Parasidis porteri sp. n. Chile p. 172, fig. BRÈTHES t.c.

Pseudosmilia gen. n. p. 156, *arrowi* sp. n. Chile p. 157 fig., BRETHES t.c.

Pullus gilberti Chile p. 168, *caseyi* Brazil, *piceipennis* Argentina p. 170, *hians* Brazil p. 171 spp. n. figs., BRÈTHES t.c.—*P. suturalis* f. n. *inlimbatus* p. 24; *subvillosus* f. n. *meridionalis* p. 41 Europe, MADER Bestim.-Tab. europ. Coleopt. Heft 94.

Scymnus frosti p. 171, *ludovicianus*, *aztecanus*, *emertoni* p. 172, *duplicatus*, *quadrarius* p. 173, *puritanus*, *marinicus* p. 174, *apiciventris*, *vicksburgicus*, *molliculus*, *minutissimus* p. 175, *distinctus* p. 176, spp. n. N. America, CASEY Mem. Col. 11.—*S. apetzi* ab. *wingelmülleri* n.n. for ab. *mülleri* Wingelm. p. 37, MADER Bestim.-Tab. europ. Coleopt. Heft 94.—*S. silesiacus* subsp. n. *lipicensis* Lipizza (Croatia ?) p. 75, MÜLLER Boll. Soc. ent. ital. 56.—*S. uncinatus* sp. n. Mexico p. 532, SICARD Ann. Mag. N. H. (9) 14.

Solanophila goetzii sp. n. Kamerun p. 129, ALINDER Mitt. münchn. ent. Ges. 14.—*S. negligens* p. 28, *gyldenstolpei* p. 29, spp. n. C. Africa, WEISE Ark. Zool. 16 no. 22.

Stictospilus gen. n. p. 153, *darwini* sp. n. Chile and Patagonia p. 154 figs., BRÈTHES An. Mus. Nac. H. n. B. Aires 33.

PHALACRIDAE.

Acylomus asiaticus **sp. n.** Ceylon p. 244, CHAMPION Ent. Mo. Mag. **60.**

Heterostilbus **gen. n.** p. 165, *marginatus, laevigatus* India p. 166, *minutulus* Ceylon p. 245, **spp. n.,** CHAMPION t.c.

Merobrachys fuscoguttatus **sp. n.** India p. 241, CHAMPION t.c.

Ochrolitoides **gen. n.** p. 245, *magister* Ceylon, *siamensis* Siam p. 246 **spp. n.,** CHAMPION t.c.

Olibrus nainiensis p. 238, *platycephalus* p. 239, **spp. n.** India, CHAMPION t.c.

Parischius noteroides synonymy p. 239, CHAMPION t.c.

Phalacrus ? apicipennis **sp. n.** Argentina p. 146 fig., BRÈTHES An. Mus. Nac. H. n. B. Aires **33.**—*P. brisouti* Rye (= *hybridus* Flach) p. 138, *luteicornis* **sp. n.** India p. 238, CHAMPION Ent. Mo. Mag. **60.**

Sphaerostilbus **gen. n.** *dilatatus* **sp. n.** India p. 164 figs., CHAMPION t.c.

Stilbomimus **gen. n.** p. 242, *polymorphus* (with **varr. n.** *bispustulatus, confluens, circumductus, sexpustulatus*) p. 243, *v-flavum, diluticollis* p. 244 India, *borneensis* p. 243 Borneo **spp. n.,** CHAMPION t.c.

Stilbus curvolineatus **sp. n.** Bengal p. 242, CHAMPION t.c.

MYCETOPHAGIDAE.

Mycetophagus key p. 104, *piceus* **abb. n.** *brisouti, bonnairei* p. 105, *fontisbellaquei, magnini, francoisi* France p. 106, MÉQUIGNON Bull. Soc. ent. Fr. **1924.**

DERMESTIDAE.

Anthrenus (*Helocerus*) *heptamerus* **sp. n.** N. Africa p. 62 fig., DE PEYERIMHOFF Bull. Soc. ent. Fr. **1924.**

Dermestes mormonalis **sp. n.** Utah p. 185, CASEY Mem. Col. **11.**—*D. elegans* **var, n.** *nadeghdae* Asia p. 231, PLAVILSTSHIKOV Ann. Mag. N. H. (9) **13.**

Orphinus rufofasciatus Philippines, *madecassus* Madagascar, **spp. n.** p. 3, PIC Mél. exot. ent. **41.**

Thaumaglossa rufoapicalis **sp. n.** Tonkin p. 2, PIC t.c.

Trogoderma ajax **sp. n.** Utah p. 186, CASEY Mem. Col. **11.**—*T. babaulti* **sp. n.** B. E. Africa p. 12, PIC Voy. Babault Afr. or. angl. **1921.**—*T. granarium,* morphology, biology pp. 129–172 fig., VOELKEL Arb. biol. Reichsanst. Land- u. Forstw. **13.**

BYRRHIDAE.

Acontosceles **gen. n.** p. 27, *hydroporoides* **sp. n.** India p. 29 figs., CHAMPION Ent. Mo. Mag. **60.**

Byrrhus fasciatus var. *reyi* **n. n.** for var. *arcuatus* Rey (nec Sturm) p. 232, PLAVILSTSHIKOV Ann. Mag. N. H. (9) **13.**

Pseudeucinetus zygops Hell. (=*Thaumastodus fusiformis* Champ.) p. 116, CHAMPION Ent. Mo. Mag. **60.**

Syncalypta ganglbaueri **n. n.** for *oblonga* Gangl. (nec Mots.) p. 233, PLAVILSTSHIKOV Ann. Mag. N. H. (9) **13.**

Thaumastodinae **subfam. n.** p. 25, CHAMPION Ent. Mo. Mag. **60.**

Thaumastodus **gen. n.** p. 25, *fusiformis* **sp. n.** Philippines p. 27 figs., CHAMPION t.c. (see *Pseudeucinetus zygops*).

PARNIDAE (DRYOPIDAE).

Helichus tenuis, lareynioides, **spp. n.** India p. 235, CHAMPION Ent. Mo. Mag. **60.**

Sostea rufoapicalis Sumatra, *sangirensis* Sanghir, *diversa* Asia Minor p. 1, *semistriata, robusta* Sumatra p. 2 **spp. n.,** PIC Mél. exot. ent. **41.**

HETEROCERIDAE.

Heterocerus flexuosus **subsp. n.** *syrticus* Tunisia p. 159, DE PEYERIMHOFF Bull Soc. ent. Fr. **1924.**

THORICTIDAE.

Thorictoides heydeni, biology, classification, larva pp. 1–7 fig., VAN EMDEN Treubia **6.**

Thorictus normandi p. 15, *tunisius* p. 16, **spp. n.** Tunis fig., CHOBAUT Bull. Soc. ent. Fr. **1924.**—*T. becharensis, vaucheri,* p. 105, *therondi* p. 106, *theryi* p. 107, **spp. n.** Morocco, CHOBAUT Bull. Soc. Sci. nat. Maroc **4.**

SPHINDIDAE.

Aspidiphorus asiaticus **sp. n.** India p. 263, CHAMPION Ann. Mag. H. N. (9) **13.**

LYCTIDAE.

Lyctus brunneus genitalia p. 581, figs., ALTSON J. Linn. Soc. (Zool.) **35.** —*L. brevipennis* p. 183, *rectangulus* p. 184, **spp. n.** N. America, CASEY Mem. Col. **11.**

Lendomus **gen. n.** p. 184, *politus* **sp. n.** Quebec p. 185, CASEY Mem. Col. **11.**

BOSTRYCHIDAE.

The Bostrychidae of French Tropical Africa, with keys, LESNE Encyc. ent. Paris **3** 301 pp. 250 figs. 38 maps 1 pl.

Acantholyctus **gen. n.** for *cornifrons* Lesne p. 98, LESNE t.c.

Apate key p. 247, *raricoma* **sp. n.** Ivory Coast p. 256, LESNE t.c.

Lichenophanes key p. 116, *percristatus* **sp. n.** fig. Gabun p. 125, LESNE t.c.

ANOBIIDAE.

Caenocara trisulcata **sp. n.** India p. 246, CHAMPION Ent. Mo. Mag. **60.**—*C. subplana* **sp. n.** Seychelles p. 373 figs., SCOTT Ann. Mag. N. H. (9) **14.**

Dorcatoma insulana **sp. n.** Seychelles p. 376 figs., SCOTT t.c.

Ernobius mollis, explanatus, nigrinus, abietis, angusticollis, biology pp. 311–338 fig., TRÄGÅRDH Medd. Stat. Skogsförsöksanst. **21.**

Falsogastrallus seychellensis **sp. n.** Seychelles p. 357 figs., SCOTT Ann. Mag. N. H. (9) **14.**

Lasioderma (*Hypora*) *semirufulum* **var. n.** *vacaresiense* France p. 103, CHOBAUT Bull. Soc. ent. Fr. **1924.**

Mesocoelopus silhouettae **sp. n.** Seychelles p. 366 figs., SCOTT Ann. Mag. N. H. (9) **14.**

Mesothes tenuibrachium **sp. n.** Seychelles p. 362 figs., SCOTT t.c.

Metadorcatoma **gen. n.** p. 378, *peculiaris* **sp. n.** Seychelles p. 383 figs., SCOTT t.c.

Metatheca **gen. n.** p. 418, *rugulosa* p. 421 **sp. n.** Seychelles figs., SCOTT t.c.

Mirosternus excisipalpis p. 369, *alluaudi* p. 372, **spp. n.** Seychelles figs., SCOTT t.c.

Nesotheca **gen. n.** p. 386, key p. 395, *typica* p. 396, *lateoblonga* p. 399, *subdepressa* p. 401, *cognata* p. 403, *praslinensis* p. 405, *germana* p. 407, *communis* p. 409, *simillima* p. 412, *maxima* p. 414 Seychelles, *tenasserimensis* p. 416 Tenasserim **spp. n.** figs., SCOTT t.c.

Paratheca **gen. n.** p. 423, *borneensis* Borneo p. 424, *assamensis* Assam p. 425, **spp. n.** figs., SCOTT t.c.

Petalium thomasseti **sp. n.** Seychelles p. 360 figs., SCOTT t.c.

PTINIDAE.

Ptinus sexpunctatus bred from cells of *Osmia rufa* p. 29, HAMM Ent. Mo. Mag. **60.**—*P. gothicus* p. 348, *monticola* p. 351, *sechellarum* p. 354, **spp. n.**, Seychelles figs., SCOTT Ann. Mag. N. H. (9) **14.**

CLERIDAE.

Classification of the Philippine Cleridae with keys, CHAPIN Phil. J. Sci. **24** pp. 159–286 5 pls.

Systematic and synonymic notes on Cleridae, CORPORAAL Tijd. Ent. **67** pp. 195–196.

Feeding habits of Cleridae, FROGGATT Austral. Nat. **5** p. 172.

Allochotes praslinensis **sp. n.** Seychelles p. 304, CHAMPION Trans. Ent. Soc. **1923.**—*A.* key to Philippine p. 257, *bakeri, pallidus* p. 258, **spp. n.**, Philippines, CHAPIN Phil. J. Sci. **24.**

Brachycallimerus **gen. n.** (=*Callimerus* (pars) auct.) genotype, *Callimerus latifrons* Gorh. p. 190, CHAPIN t.c.

Callimerus key to Philippine p. 192, *intermedius* p. 198, *bisoctonotatus* p. 201, *trifoliatus* p. 206, **spp. n.** Philippines, CHAPIN t.c.

Callimerus (pars) auct. see *Brachycallimerus.*

Cladiscus key p. 168, *clypealis* p. 169, *vicinus, mindanensis* p. 170, *bicolor, bakeri* p. 171, **spp. n.** Philippines, CHAPIN Phil. J. Sci. **24.**

Coptoclerus **gen. n.** p. 243, key to Philippine p. 244, *binotatus* p. 245, *fasciatus*, *triangularis* p. 246, *intricatus* p. 247, *obliquus*, *albipictus* p. 248, *apicalis* p. 249, *variegatus*, *sericeus* p. 250, **spp. n.** Philippines, CHAPIN t.c.

Cyrtinoclerus **gen. n.** p. 253, *cyrtinoides* **sp. n.** Philippines p. 254 fig., CHAPIN t.c.

Neohydnus key to Philippine p. 181, *attalus* p. 182, *ater*, *bakeri* p. 183, *luzonicus* p. 184, *granulatus*, *pictus* p. 185, *tibialis*, *constrictus* p. 186, *auripilosus*, *colon* p. 187, *sexnotatus*, *scutellatus* p. 188, *pilosus* p. 189, **spp. n.** Philippines, CHAPIN t.c.

Omadius key to Philippine p. 217, *brunneus* p. 222, *pruinosus* p. 223, *sibuyanus* p. 227, **spp. n.** Philippines, CHAPIN t.c.

Operculiphorus philippinus **sp. n.** Philippines p. 229, CHAPIN t.c.

Opetiopalpus sabulosus **subsp. n.** *martynovi* Manchuria p. 231, PLAVILSTSHIKOV Ann. Mag. N. H. (9) **13.**

Orthrius key p. 212, *bicrucis*, *pallidus* **spp. n.** Philippines p. 213, CHAPIN Phil. J. Sci. **24.**

Paratenerus **gen. n.** p. 274, *mindanensis* **sp. n.** Philippines p. 275, CHAPIN t.c.

Phaeocyclotomus, key to Philippine p. 236, *nigripes* **sp. n.** Philippines p. 237, CHAPIN t.c.

Pseudomadius **gen. n.** p. 214, *viridiventris* **sp. n.** Philippines p. 215, CHAPIN t.c.

Stigmatium key to Philippine p. 238, *sibuyanum*, p. 240, *bakeri* p. 241, **spp. n.** Philippines, CHAPIN t.c.

Tarsostenus univittatus egg and first-stage larva pp. 49–50 fig., ST. GEORGE J. Agric. Res. **29.**

Teneroides key to Philippine p. 271, *melanopterus*, *aurantiacus* p. 272, *tuberculatus* p. 273, *bakeri* p. 274, **spp. n.** Philippines, CHAPIN Phil. J. Sci. **24.**

Teneropsis **gen. n.** p. 275, *sibuyanus* **sp. n.** Philippines p. 276, CHAPIN t.c.

Tenerus key to Philippine p. 260, *trinotatus*, *magnus* p. 261, *pulcher* p. 262, *nigripes*, *vittiger* p. 264, *obscurus* p. 265, *basilanicus* p. 266, *luzonicus*, *sibuyanus* p. 268, *acostatus* p. 269, **spp. n.** Philippines, CHAPIN t.c.

Thalerocnemis key to Philippine p. 233, *variabilis* p. 234, *bakeri* p. 235, **spp. n.** Philippines, CHAPIN t.c.

Thaneroclerinae, **subfam. n.** p. 251, key to Philippine genera p. 252, CHAPIN t.c.

Trichodes flavocinctus **ab. n.** *distinctus* Spain p. 204, FUENTE Bol. Soc. esp. H. n. **24.**

MELYRIDAE.

Apalochrus appendicifer **var. n.** *babaulti* B. E. Afr. p. 10, PIC Voy. Babault Afr. or. angl. **1921.**

Asydates puncticeps **sp. n.** California p. 249, BLAISDELL Proc. Cal. Acad. Sci. (4) **13.**

Attalus palniensis p. 261, *sejunctus* p. 262 **spp. n.** India, CHAMPION Ann. Mag. N. H. (9) **13.**

Collops key, *dimidiatus* **sp. n.** Manchuria p. 230, PLAVILSTSHIKOV Ann Mag. N. H. (9) **13.**

Dasytastes leopardus p. 256, *maculatus* p. 258, **spp. n.** California, BLAISDELL Proc. Cal. Acad. Sci. (4) **13.**

Dasytes doderoi **sp. n.** Sardinia p. 80, PIC Boll. Soc. ent. ital. **56.**—*D. robusticornis* Turkestan, *atrimembris* Siberia, *testaceipes* Transcaucasia **spp. n.** p. 17, PIC Echange **39.**

Eutricholistra **gen. n.** key, *punctata* **sp. n.** Arizona p. 17, BLAISDELL Pan-Pacific Ent. **1.**

Hoppingiana **gen. n.** (near *Listromimus*) p. 2, *brevilabris* **sp. n.** Br. Columbia p. 3, BLAISDELL Can. Ent. **56.**

Idgia stamperi **sp. n.** Tanganyika p. 437, PIC Rev. zool. afr. **12.**—*I. luzonica* **sp. n.** Philippines p. 230, PIC Bull. Soc. ent. Fr. **1924.**

Laius sericatus **sp. n.** Seychelles p. 301, CHAMPION Trans. Ent. Soc. **1923.**

Listropsis **gen. n.**, *tinctus* **sp. n.** California p. 1, BLAISDELL Can. Ent. **56.**—*L. armatulus* **sp. n.** no locality p. 316, BLAISDELL Trans. Amer. Ent. Soc. **50.**

Listrus sinuatus p. 313, *obsoletus* p. 314, **spp. n.** California, BLAISDELL t.c.—*L. minutus* California p. 18, *foxi*, Washington p. 19, *anacapensis* California p. 20, **spp. n.**, BLAISDELL Pan-Pacific Ent. **1.**

Luzonotroglops **subgen. n.** see *Myrmecophasma.*

Myrmecophasma (*Luzonotroglops* **subgen. n.**) *carinata* **sp. n.** Philippines p. 230, Pic Bull. Soc. ent. Fr. **1924.**

Pristoscelis vandykei **sp. n.** California p. 15, Blaisdell Pan-Pacific Ent. **1.**

Trichochrous aridus **sp. n.** California p. 4, Blaisdell Can. Ent. **56.**—*T. hesperius* p. 251, *benedicti* p. 252, *imperialensis* p. 253, *gradatus* p. 254, *pallescens* p. 255, **spp. n.** California, Blaisdell Proc. Cal. Acad. Sci. (4) **13.**

Xamerpus (?) *cioides* **sp. n.** Seychelles p. 302, Champion Trans. Ent. Soc. **1923.**

Drilidae.

Selasia widenmanni **var. n.** *substriata* B. E. Afr. p. 7, Pic Voy. Babault Afr. or. angl. **1921.**

Telephoridae.

Allocotomosilis inapicalis **sp. n.** Sandakan p. 724, Pic Phil. J. Sci. **25.**

Chauliognathus bisbimaculatus (with **var. n.** *trinotatithorax*), *flavipennis, rufipes, atripennis, ignaciosus* (with **var. n.** *trimaculatus*) **spp. n.** S. America p. 20, Pic Mél. exot. ent. **41.**

Discodon curteapicale **sp. n.** Brazil p. 20, Pic Mél. exot. ent. **41.**—*D. baguionum* p. 714, *tangkulanum, mindanaonum* p. 715, *atrocyaneum, surigaonum* p. 716, *luzonicum* Philippines, *sandakanum* Sandakan p. 717 **spp. n.,** Pic Phil. J. Sci. **25.**

Drilosilis robusticornis, suturalis **spp. n.** Philippines p. 728, Pic Phil. J. Sci. **25.**

Falsomalthinus (near *Malthinus*) **gen. n.,** *pallidus* **sp. n.** Philippines p. 731, Pic Phil. J. Sci. **25.**

Ichthyurus ranikhetensis, nigricauda p. 257, *tridens* p. 258, *annulatus, malthiniformis* p. 260, **spp. n.** India figs., Champion Ann. Mag. N. H. (9) **13.**—*I. bakeri* p. 729, *bimaculatus, pilicornis* p. 730, **spp. n.** Philippines, Pic Phil. J. Sci. **25.**—*I. gerardi, elisabethae* (with **var. n.** *innotatithorax* p. 439) **spp. n.** Belgian Congo p. 438, Pic Rev. zool. afr. **12.**

Malthinus stramineus **sp. n.** India p. 256, Champion Ann. Mag. N. H. (9) **13.**

Malthodes ganglbaueri, anatomical details p. 107 fig., *nigriceps* Muls. a variety of *cognatus* Costa, *nigriceps* Muls. var. *andreae* Gangl. a synonym of *cognatus* Costa p. 109, Falzoni Boll. Soc. ent. ital. **56.**

Microichthyurus atripennis, bicoloripennis (with **var. n.** *baguionis*) **spp. n.** Philippines p. 730, Pic Phil. J. Sci. **25.**

Polemiosilis semibrunnescens Singapore, *piceolateralis* p. 722, *forticornis, proximus* p. 723, Philippines **spp. n.,** Pic Phil. J. Sci. **25.**

Silidius borgerhoffi p. 440, *nigripennis* **var. n.** *elgonensis, bicoloricornis, schoutedeni* p. 441, *curtithorax, burgeoni* p. 442, **spp. n.,** *aethiopicus* **var. n.** *subreductus* p. 443, Central Africa, Pic Rev. zool. afr. **12.**

Silis pectinicornis p. 253, *lividipennis* p. 254, *palnianus* p. 255, **spp. n.** India figs., Champion Ann. Mag. N. H. (9) **13.**—*S. particularicornis* Sandakan, *cordicollis* p. 725, *minimus, bakeri* p. 726, *bukidnonus, dilaticollis* p. 727 Philippines, **spp. n.,** Pic Phil. J. Sci. **25.**—*S. adonis* **sp. n.** Belgian Congo p. 440, Pic Rev. zool. afr. **12.**

Tripherus bakeri **sp. n.** Philippines p. 731, Pic Phil. J. Sci. **25.**

Tylocerus mindanaonis p. 718, *convexithorax, bakeri* p. 719, *discovittatus, invittatus* p. 720, *vittigerus* p. 721, **spp. n.** Philippines, Pic Phil. J. Sci. **25.**

Tytthonyx furtiva **sp. n.** Florida p. 165, Blatchley Can. Ent. **56.**

Lampyridae.

Biology of Lampyridae pp. 79–88, 122–126, 135–143, Verhoeff Zs. wiss. Insektenbiol. **19.**

Lamprophorus tenebrosus bionomics p. 68, Austin Yearb. Dept. Agric. Ceylon, **1924**; habits and life-history 15 pp. fig., Hutson & Austin Ceylon Dept. Agric. Bull. **69.**

Ototreta bicoloripes **sp. n.** Philippines p. 713, Pic Phil. J. Sci. **25.**

Pelania mauritanica bionomics pp. 10–52, Cros Bull. Soc. H. n. Afr. N. **15.**

LYCIDAE.

Homalisus fontisbellaquei **subsp. n.** *salonitanus* Dalmatia p. 74, MÜLLER Boll. Soc. ent. ital. **56.**

Lygistopterus femoralis **sp. n.** Colombia p. 32, PIC Mél. exot. ent. **42.**

Lyponia, key to species p. 171, *dolosa* p. 173, *formosana* p. 174, Formosa **spp. n.** fig., KLEINE Ent. Bl. **20.**

Planeteros soppoensis **var. n.** *bonneviei*, *sibuti* **var. n.** *burgeoni*, Belgian Congo p. 439, PIC Rev. zool. afr. **12.**

Xylobanus ignitus **sp. n.** Sumatra p. 309 fig., KLEINE Ent. Mitt. **13.**

DASCILLIDAE.

Dascyllocyphon timorensis **sp. n.** Timor p. 31, PIC Mél. exot. ent. **42.**

Ectopria rufonotata **sp. n.** (with **var. n.** *robusta*) Australia p. 31, PIC t.c.

Ennometes testaceicornis **sp. n.** Sumatra p. 30, PIC Tijd. Ent. **67.**

Eulichas baeri **var. n.** *innotatus* Luzon p. 31, PIC Mél. exot. ent. **42.**

Microcara bohemani **f. n.** *reinecki* Germany p. 261, DELAHON D. ent. Zs. **1924.**

Octoglossa rufa **sp. n.** Colombia p. 32, PIC Mél. exot. ent. **42.**

ELATERIDAE.

Key and notes on British E. African Elateridae, FLEUTIAUX Voy. Babault Afr. or. angl. **1921** pp. 1–19 figs.

Adrastus nitidulus gallica, *rachifer parisiensis*, **abb. n.** France p. 85, MÉQUIGNON Bull. Soc. ent. Fr. **1924.**—*A. protractus* **sp. n.** Alps p. 81, ROUBAL Ent. Anz. **4.**

Agriotes mancus, notes pp. 69–72 fig., GORHAM Proc. Acadian Ent. Soc. **1923**; biology pp. 1–12 fig., ZOLK Tartu Ülikooli Ent. no. **4.**—*A. obscurus* pupation pp. 86–92 fig, WILLAUME Rev. Path. vég. & Ent. agric. **11.**

Drasterius bimaculatus **ab. n.** *levantinus* Asia Minor, Cyprus p. 81, ROUBAL Ent. Anz. **4.**

Elater satrapa, *praeustus*, notes pp. 117–121, DORN Ent. Jahrb. **31** 1922.

Hemirhipus submetallis **sp. n.** Fr. Guiana p. 184, FLEUTIAUX Bull. Soc. ent. Fr. **1924**

Megapenthes vespertilionis **sp. n.** Assam p. 119, FLEUTIAUX Rec. Ind. Mus. **26.**

EUCNEMIDAE (MELASIDAE).

Coomanius **gen. n.** (near *Henecocerus*) *lugubris* **sp. n.** Tonkin p. 157, FLEUTIAUX Bull. Soc. ent. Fr. **1924.**

Dirhagus rouani **sp. n.** Tonkin p. 285, FLEUTIAUX Bull. Mus. H. n. Paris **1924.**

Fornax cephalotes **sp. n.** Tonkin p. 156, FLEUTIAUX Bull. Soc. ent. Fr. **1924.**—*F. blaisei* **sp. n.** Tonkin p. 285, FLEUTIAUX Bull. Mus. H. n. Paris **1924.**

Otho coomani **sp. n.** Tonkin p. 157, FLEUTIAUX Bull. Soc. ent. Fr. **1924.**

Poecilochrus striatus **sp. n.** Tonkin p. 156, FLEUTIAUX t.c.

Pterotarsus key p. 302, *mouhoti* p. 305, *modiglianii* p. 306, *bicolor* p. 307 Philippines, *chevrolati* Siam, *bonvouloiri* Asiatic Archipelago p. 308, **spp. n.**, FLEUTIAUX Ann. Soc. ent. Fr. **92.**

RHIPICERIDAE.

Ennometes horni **sp. n.** Formosa p. 30 fig., VAN EMDEN Ent. Mitt. **13.**

Sandalus atricolor **var. n.** *babaulti* B. E. Afr. p. 4, PIC Voy. Babault Afr. or. ang. **1921.**—*S. sauteri* **sp. n.** Formosa p. 28 fig., VAN EMDEN Ent. Mitt. **13.**

Simianellus **gen. n.** near *Simianus*, *melanocephalus* **sp. n.** Formosa p. 33, VAN EMDEN Ent. Mitt. **13.**—*S. thoracicus* p. 90, *obscurus* p. 91, *incisus* p. 93, *globicollis* India, *basalis* p. 94 Celebes **spp. n.**, VAN EMDEN Ent. Bl. **20.**

BUPRESTIDAE.

Synonymical and other notes on Australian Buprestidae, CARTER Proc. Linn. Soc. N.S.W. **49** p. 22.

Acmaeodera coomani **sp. n.** Tonkin p. 178, BOURGOIN Bull. Soc. ent. Fr. **1924.**—*A. adspersula* **var. n.** *exclamationis* Dalmatia, *oresitropha* Caucasus p. 11, *tenuifrons*, *klapaleki* p. 12 (with **subsp. n.** *elbursi* Persia p. 13) **spp. n.** Syria, *rufomarginata* **subsp. n.** *syriaca*, *kheili* **sp. n.** Syria p. 13 fig., OBENBERGER Ceskosl. ent. spol. Jub. Sbornik **1924.**—*A. quadriareolata* Cochin China, *anthobia* Texas p. 33, *holiki* Guatemala p. 34, *montezuma* Mexico p. 35, OBENBERGER Arch. Natg. **90** A 3.

Agelia aegyptica **sp. n.** Egypt (with **subsp. n.** *montana* Abyssinia) p. 14 fig., OBENBERGER Ceskosl. ent. spol. Jub. Sbornik **1924.**—*A. nickerli* **sp. n.** (with **var. n.** *coxalis*), *ragazzi* **var. n.** *humerosa* Abyssinia, *placida* **var. n.** *paupera*, *peteli* **var. n.** *gratiosa* E. Africa p. 37, OBENBERGER Arch. Natg. **90** A 3.

Agrilaxia dohrni p. 71, *schmidti* p. 72, *schroederi* p. 73 Costa Rica, *cordigera* p. 71 Dutch Guinea, **spp. n.,** OBENBERGER t.c.

Agrilodia oporina **sp. n.** Costa Rica p. 138, OBENBERGER t.c.

Agriloides longa p. 139, *nickerli* Brazil, *gebhardti* Argentine p. 140, **spp. n.,** OBENBERGER t.c.

Agrilus doddi, *bispinosus* p. 28, *semiviridis*, *brevis* p. 29, **spp. n.** Queensland, CARTER Proc. Linn. Soc. N.S.W. **49.**—*A. foveicollis* in Bulgaria, biology p. 117, MOKRZECKI Trav. Soc. bulg. Sci. nat. **9** 1921.—*A. auristernum* China p. 34, *ataman* Vladivostok, *mikado* Japan p. 35, **spp. n.,** *sinensis* **subsp. n.** *lameyi* Tonkin p. 36, *kheilianus* Himalayas p. 38, *nigrocoerulans* China, **spp. n.;** *ater* **subspp. n.** *jureceki* Russia p. 39, *eutenes* Italy; *viridis* (**varr. n.** *communis* Europe p. 41, *mixtulus* France, *krasai* Czecho-Slovakia) **subspp. n.** *caenus* Sicily, *melantatus* Transbaikalia, *poppiusi* p. 40, *krogerusi* Siberia; *brydli* Caucasus p. 41, *gebleri* Transbaikalia **spp. n.,** *betuleti* **var. n.** *saliceti*, *foveicollis* **subsp. n.** *nicolanus*, p. 42; *insuspectus*, *sibiricola* p. 43, *ignoratus* p. 44, *taigicola* p. 45, *ussuricola* p. 46, Siberia **spp. n.,** *amurensis* **varr. n.** *burjaticus*, *lineimargo*, *euchryseus*, Transbaikalia p. 47, *peregrinus* **subsp. n.** *prasinulus* Vladivostok, *rumanicus* **sp. n.** Rumania, p. 48, *auricollis* **subspp. n.** *distinctipilis* France, *madari* p. 49, *derasofasciatus* **var. n.** *nigrator* Caucasus, *graminis* **var. n.** *akbesinus* Syria, *kyselyi* **n.n** for *fissifrons* Ab. (nec Frm.), *nemorivagus* Sicily p. 50, *cinctiformis* Germany, *escorialensis* Spain p. 51, *trinacriae* Sicily, *suturissignatus* Russia p. 52, *podjinus* China p. 53, *subroscidus* Sicily, *tokatensis* Asia Minor p. 54, *pekinensis* Pekin, *klapaleki* Himalayas p. 55, *jenissejensis* Siberia p. 56, **spp. n.** figs., OBENBERGER Ceskosl. ent. spol. Jub. Sbornik **1924.**—*A. menadoensis* **sp. n.** Celebes p. 26, OBENBERGER Treubia **6.**—*A.* key pp. 559–572, *croceisquamis* p. 572, *pictithorax* p. 574 Borneo, *tristinus* Singapore p. 575, *spinellifer* Borneo p. 576, **spp. n.,** *acutus* **ab. n.** *asphaltipennis* Sumatra, Java, *dajakorum* Borneo, Singapore, p. 578, *saundersianus* Philippines p. 580, *simillipictus* p. 581, *aureocoerulans* Borneo p. 582, *falsulus* Singapore p. 583, *bidentellus* Borneo p. 584, *intrusus* p. 585, *kheili* Philippines p. 587, *viridicolor* p. 588, *orientis* p. 589, *encaustus* Sulu Is. p. 590, **spp. n.,** *fisheri* **n.n.** for *fulvovittatus* Fisher p. 591, *harlequin* p. 592, *sandakanus* Borneo p. 593, *xenius* Key Is. p. 594, *atratulus* Sulu Is. p. 595, *oppositus* p. 596, *microtatus* p. 597, *operosus* Borneo p. 598, *singaporensis* Singapore p. 599, *tardulus* Sulu Is. p. 601, *pilipennis* p. 602, *uniformipubis* Borneo p. 603, *pilistoma* p. 604, *luctuosellus* p. 606, *ludificator* Sulu Is. p. 607, *carinipennis* p. 608, *persolitarius* Singapore p. 609, *carinellifer* Basilan p. 610, *pterochlorus* Sulu Is. p. 612, *cannulus* p. 613, *exclusus* Philippines p. 614, *perniciosellus* p. 616, *lazar* p. 617, *oneratus* Malay Penins., *optatus* Mindanao p. 618, **spp. n.** figs., OBENBERGER Phil. J. Sci. **25.**—*A.* key p. 136, *surcoufi* p. 117, *tebinganus*, *pilosidorsis* p. 120, *delphius*, *demetrius* p. 125, *macilentus* p. 126, *mirabiliformis* p. 128, *malayanus* p. 129, *nodieri* p. 132, *albocericellus* p. 133 Sumatra, *nirius* p. 123, *protenor* p. 134 Java, *obtusulus* p. 121, *ternatensis* p. 131 Ternate, *tolianus* p. 121, *celebicola* p. 123 Celebes, *dichrosomus* Formosa p. 122, *cochinchinae* p. 124, *micromegas*, *argenteornatus* p. 129, *admonitor* p. 131, *hortator* p. 132, Cochin China, *paradiseus* p. 118, *eupoetus* p. 126, *yulensis* p. 130, *anachlorus* p. 133, *anabates*, *tenebrator* p. 134 New Guinea, *fidjiensis* (with **subsp. n.** *tetrastichus*) Fiji p. 119, *solemnis*, *nesigena*, *anachaetus* N. Australia p. 127, *tonkinigena* Tonkin p. 135, *cupido* Brazil p. 137 **spp. n.,** *acutus* **ab. n.** *asphaltipennis* Java and Sumatra p. 120, OBENBERGER Arch. Natg. **90** A 3.

Anadora mechowi **subspp. n.** *rivularis* Congo, *camerunica* Kamerun p. 105, OBENBERGER Arch. Natg. **90** A 3.

Anthaxia fouqueti **sp. n.** Indo-China p. 260, BOURGOIN Bull. Soc. ent. Fr. **1923.**—*A. bryanti* p. 73, *micantula* p. 76, *gebhardti* E. Africa, *obesula* p. 77, *hardenbergi* p. 80, *sculptipennis* p. 81, *suaveola* S. Africa, *hypsibata* Kilimanjaro p. 74, *impubis* p. 75, *schoutedeni*

p. 76, *obliquepilosa* p. 78, *inconspicua*, *katangae*, *sordidicolor* p. 79 Congo, *elegantula*, *pacatula* Angola p. 75, *rhodesiae* Rhodesia p. 80, *drawida* E. India p. 81 **spp. n.**, *rothkirchi* **subsp. n.** *littorea* Gold Coast p. 78, *luctuosa* **subsp. n.** *tinantiana* Belgian Congo p. 79, OBENBERGER Arch. Natg. **90** A 3.—*A. olympica* **var. n.** *smyrnensis* Smyrna, *manca* **ab. n.** *chloris* Italy, Sicily, *nitidula* **abb. n.** *dolinskii* Podolia, *rumelica* Turkey, *sublatrica* Czecho-Slovakia, *vittula* **var. n.** *parnassica* Parnassos, *salicis* **varr. n.** *spathuligera* Herzogovina, *discoidalis* Anatolia p. 27; *segurensis* Spain p. 28, *burjatica* Lake Baikal p. 29, **spp. n.**, *ussuriensis* **subsp. n.** *jurecki* Vladivostok p. 29, OBENBERGER Ceskosl. ent. spol. Jub. Sbornik **1924**.

Anthaxomorphus key p. 162, *corporaali* Sumatra, *occidentalis* Angola, *lacustris* p. 161, *aethiopicus* p. 162 Tanganyika, **spp. n.**, OBENBERGER Arch. Natg. **90** A 3.

Aphanisticus endeloides p. 31, *browni* p. 32, **spp. n.** Queensland, CARTER Proc. Linn. Soc. N.S.W. **49**.—*A. gebhardti* Cape Town p. 158, *cochinchinae* Cochin China, *gestroi* New Guinea p. 159, **spp. n.**, OBENBERGER Arch. Natg. **90** A 3.—*A.* key p. 621, *bohaci* p. 623, *corniceps* p. 624, *sandakanus* Borneo, *peninsulae* p. 625, *perakensis* Malay Penins. p. 626, *dapitani* Mindanao p. 627, **spp. n.** figs., OBENBERGER Phil. J. Sci. **25**.—*A. bodongi*, *jeanneli*, *alluaudi* Kerremans, see *Cylindromorphus*.

Belionota enganensis **sp. n.** Engano, *aenea* **var. n.** *strandi* New Guinea, *walkeri* **var. n.** *purpurea* Borneo p. 82, OBENBERGER Arch. Natg. **90** A 3.

Brachys barberi **sp. n.** Arizona p. 12, FISHER Proc. Ent. Soc. Wash. **26**.

Briseis obscurata (with **subsp. n.** *tenebrosa*) p. 67, *sagitta* Australia, *papuana* Br. New Guinea p. 68, **spp. n.**, OBENBERGER Arch. Natg. **90** A 3.

Buprestis fremontiae **sp. n.** California p. 70, BURKE Proc. Ent. Soc. Wash. **26**.

Buprestodes **gen. n.** p. 23, *coruscans*, *variegata* p. 24, **spp. n.** West Australia figs., CARTER Proc. Linn. Soc. N.S.W. **49**.

Callimicra bruchi **sp. n.** Argentina p. 166, OBENBERGER Arch. Natg. **90** A 3.

Capnodis indica **subsp. n.** *fuksai* India p. 15, OBENBERGER Ceskosl. ent. spol. Jub. Sbornik **1924**.

Chalcophorella notes on Japanese species p. 15, THÉRY Bull. Soc. ent. Fr. **1924**.—*C. orientalis* **sp. n.** Beluchistan p. 14 fig., OBENBERGER Ceskosl. ent. spol. Jub. Sbornik **1924**.

Chrysobothris notaticollis **sp. n.** Fr. Indo-China p. 260, BOURGOIN Bull. Soc. ent. Fr. **1923**.—*C. sibuyana* **sp. n.** Philippines p. 47, FISHER Phil. J. Sci. **24**.—*C. turkestanica* p. 29, *partha* p. 30 Turkestan, **spp. n.**, *chrysostigma* **var. n.** *distigma* Transbaikalia p. 31 fig., OBENBERGER Ceskosl. ent. spol. Jub. Sbornik **1924**.—*C. peruviae* Peru p. 82, *ignisternum* p. 83, *mrazi* p. 84 Brazil, *boliviae* Bolivia p. 83 (with **subsp. n.** *ayrensis* Argentine p. 84), *ceramensis* Isl. Ceram p. 85, *prava*, *elisabetina* p. 86, *cunctus* p. 87, *eos* p. 88, *crenulipyga* p. 89, *burgeoni*, *sacrata* p. 90 Congo, *hera* p. 88, *ravilla* p. 89 Victoria Nyanza, **spp. n.**, OBENBERGER Arch. Natg. **90** A 3.

Chrysochroa annamensis **sp.n.** Annam p. 154, BOURGOIN Bull. Soc. ent. Fr. **1924**.

Chrysodema sibuyanica **sp. n.** Philippines p. 45, FISHER Phil. J. Sci. **24**.

Cisseicoraebus bakeri **sp. n.** Philippines, FISHER Phil. J. Sci. **24**.

Cisseis viridipurpurea **sp. n.**, *cupripennis* Guér. omitted from recent revision, Australia p. 27, CARTER Proc. Linn. Soc. N.S.W. **49**.—*C. fascigera* Obenb. see *Cisseoides*, *carteri* **sp. n.** W. Australia p. 109, OBENBERGER Arch. Natg. **90** A 3.

Cisseoides fascigera Obenb. (=*Cisseis fascigera* Obenb.), *papuana* New Guinea, *carteri* p. 106, *blackburni*, *madari* p. 107, *gebhardti* p. 108, *nigrosericea* p. 109, Australia **spp. n.**, OBENBERGER t.c.

Clema key p. 157, *transvaalensis* **sp.** n. Transvaal p. 156, OBENBERGER t.c.

Coomaniella **gen. n.** *violaceipennis*, *modesta* **spp. n.** Tonkin p. 178, BOURGOIN Bull. Soc. ent. Fr. **1924**.

Coroebus tonkinensis, clermonti **spp. n.** Tonkin p. 179, Bourgoin Bull. Soc. ent. Fr. **1924.**—*C. bifasciatus* **var. n.** *aethiops* (patria ?), *guerryi* **subsp. n.** *wendleri* India, *nebulosus* p. 31, *klapaleki* China, *srdinkoi* Himalaya p. 32, **spp. n.** fig., Obenberger Ceskosl. ent. spol. Jub. Sbornik **1924.**—*C. stichai* **sp. n.** Tonkin p. 97, Obenberger Arch. Natg. **90** A 3.

Cryptodactylus indicus Travancore p. 104, *chinensis* Hong-Kong p. 105, **spp. n.,** Obenberger Arch. Natg. **90** A 3.

Cylindromorphus, Aphanisticus bodongi, jeanneli, alluaudi Kerremans transferred to, p. 622, Obenberger Phil. J. Sci. **25.**—*C. transverserugosus* Transvaal, *mrazi* Brazil, **spp. n.** p. 157, Obenberger Arch. Natg. **90** A 3.

Cyphogastra bruyni Lansb. (=*collaris* Obenb.) p. 37, Obenberger t.c.

Deyrollius cupreolus **sp. n.** Brazil p. 117, Obenberger t.c.

Endelus gestroi **sp. n.** New Guinea p. 160, Obenberger t.c.—*E.* key p. 628, *belial* Los Baños p. 629, *bakerianus* Singapore p. 630, *borneensis* Borneo p. 631, *aphanisticinus* Singapore p. 632, **spp. n.** figs., Obenberger Phil. J. Sci. **25.**

Ethion leai **sp. n.** S. Australia p. 26, Carter Proc. Linn. Soc. N.S.W. **49.**

Evides interstitialis **sp. n.,** *pubiventris* **subsp. n.** *longula* W. Africa p. 38, Obenberger Arch. Natg. **90** A 3.

Halecia sordidenotata Costa Rica p. 39, *violaceiventris* Brazil p. 40 **spp. n.,** Obenberger Arch. Natg. **90** A 3.

Iridotaenia terrae-reginae **sp. n.** Queensland p. 36, Obenberger Arch. Natg. **90** A 3.

Janthe lacustris Tanganyika p. 166, *anamita, cordieri* Cochin China, *khurdae* E. India p. 167, **spp. n.,** Obenberger Arch. Natg. **90** A 3.

Julodis linnei p. 27, *fabricii* p. 30, *braunsi* S. Africa, *strandi* p. 28, *anthobia* p. 29, *occidentalis* (with **var. n.** *chalcopus*) p. 31, *nivifera* p. 32, S.W. Africa **spp. n.,** Obenberger Arch. Natg. **90** A 3.—*J. ethema* **subsp. n.** *gotwendensis* Persia; *euphratica* **subspp. n.** *beludjistana, nusskina,* Baluchistan, *mrazi* Afghanistan; *variolaris* **subsp. n.** *kokandensis* Turkestan, p. 6; *eoa* **subsp. n.** *aberrans* Baluchistan p. 7; *afghanica* Afghanistan p. 7, *klapaleki* p. 9, *ormarensis* Baluchistan p. 10, **spp. n.** fig., Obenberger Ceskosl. Ent. spol. Jub. Sbornik **1924.**

Lampra bedoci p. 138, *blairi* p. 178 **spp. n.** Fr. Indo China, Bourgoin Bull. Soc. ent. Fr. **1924.**—*L. ternatensis* **sp. n.** E. Indies p. 69, Obenberger Arch. Natg. **90** A 3.—*L. clermonti* **sp. n.** Tibet p. 15, *gloriosa* **var. n.** *chariessa* Persia, *kerremansi* **n. n.** for *cupreosplendens* Kerr. Formosa, *refulgens* **sp. n.** China p. 16, *circumciliata* **subsp. n.** *montana* Persia, *decipiens* **var. n.** *deaurata* Bohemia, *mirifica* **var. n.** *picta* Italy, *klapaleki* Syria, p. 17, *ussuriensis* Ussuri p. 18, *amurensis* Siberia p. 19. fig., **spp. n.,** Obenberger Ceskosl. ent. spol. Jub. Sbornik **1924.**

Lius joukli **sp. n.** Brazil p. 165, Obenberger Arch. Natg. **90** A 3.

Melanophila key to Palaearctic p. 21, *cyanea* **subsp. n.** *transbaicalica* Transbaikalia, *thessala* **sp. n.** Greece p. 20, Obenberger Ceskosl. ent. spol. Jub. Sbornik **1924.**

Meliboeus quadriguttatus, coomani p. 179, key, *vitalisi, arrowi* p. 214, *sulcifrons cyaneoscutellaris, acutus, laoticus, fleutiauxi* p. 215, **spp. n.** Indo-China, Bourgoin Bull. Soc. ent. Fr. **1924.**—*M. carbonicolor, pravus* Borneo p. 552, *dapitanus* Mindanao p. 553, **spp. n.** figs., Obenberger Phil. J. Sci. **25.**—*M. graminis coelestinus* **n. n.** for *graminis coelestis* Ob. nec *episcopalis coelestis,* Ob., *violaceus* **var. n.** *carbo* Rhodes, Sicily, *violaceus* **subsp. n.** *ponticus* Russia, *turkestanicus* **sp. n.** Turkestan p. 33 fig., Obenberger Ceskosl. ent. spol. Jub. Sbornik **1924.**—*M. cochinchinae* Cochin China, *travancorensis* Travancore p. 114, *javanicus* Java, *crassulus* p. 115, *centaureae* Rhodesia, *sericeomicans* Kamerun p. 116, *brunneolus* Transvaal p. 117, **spp. n.,** Obenberger Arch. Natg. **90** A 3.

Melobasis vitalisi **sp. n.** Cambodia p. 66, Obenberger Arch. Natg. **90** A 3.

Merimna corporaali **sp. n.** New Guinea p. 69, Obenberger t.c.

Neosambus papuanus **sp. n.** New Guinea p. 103, Obenberger t.c.

Neotorresita achardi **subsp. n.** *occidentis* W. Australia p. 69, OBENBERGER t.c.

Notobubastes **gen. n.** p. 24, *occidentalis*, *orientalis* p. 25, *aurosulcata* p. 26 **spp. n.** Australia fig., CARTER Proc. Linn. Soc. N.S.W. **49.**

Oedisterna boera, *scabrosula* **spp. n.** S. Africa p. 41, OBENBERGER Arch. Natg. **90** A 3.

Pachyschelus orientalis p. 654, *singaporensis* p. 655, **spp. n.** Singapore figs., OBENBERGER Phil J. Sci. **25.**

Paracephala impressicollis, *strandi* p. 155, *niveiventris* p. 156, **spp. n.** Queensland, OBENBERGER Arch. Natg. **90** A 3.

Paradeudora **subgen. n.** see *Sphenoptera.*

Paradora lacustris **subsp. n.** *marina* Mozambique p. 105, OBENBERGER Arch. Natg. **90** A 3.

Paragrilus kheili p. 141, *mrazi*, *paulensis* p. 142 (with **var. n.** *minor*), *alutaceidorsis* p. 143, *gestroi* p. 144, *argentinus* (with **varr. n.** *cupreolus*, *liliputanus*, *monticola*) p. 145, *punctifrons*, *strandi* p. 146, *helferi* (with **subsp. n.** *cortezi*) p. 147, *acuticostis* p. 148, *nickerli* p. 149 (with **var. n.** *nudus*), *vavrai*, *cordai* p. 150, *modicoides*, *aeneus* p. 152, *bonariensis*, *dormitzeri* p. 153 (with **var. n.** *kitzbergeri*), *ignotus*, *similis* p. 154, *coerulans*, p. 155 **spp. n.**, *tenuis* **subsp. n.** *lecontei* N. America, *costaricencis* **varr. n.** *hoscheki* Costa Rica, *pehlkei* Colombia p. 149, *modicus* **subspp. n.** *hansi* p. 151, *vimmeri* p. 152 Costa Rica, *dudai* Brazil p. 151, OBENBERGER t.c.

Paratrachys fisheri Philippines p. 11, *kannegieteri* Batoe Is. p. 12, **spp. n.**, OBENBERGER N. Beitr. syst. Insekt. **3.** —*P. bakeri* **sp. n.** Singapore p. 653, OBENBERGER Phil. J. Sci. **25.**—*P.* systematic position p. 202, *bicincta* **sp. n.** Singapore p. 205 fig., THÉRY Bull. Soc. ent. Fr. **1924.**

Pelecopselaphus strandi **sp. n.** Costa Rica p. 38, OBENBERGER Arch. Natg. **90** A 3.

Philanthaxia cumingii **var. n.** *basalis* Philippines p. 49, FISHER Phil. J. Sci. **24.**

Pithiscus nickerli Curaçao, *waterhousei* Venezuela p. 96, *stricklandi* p. 97 **spp. n.**; *vulneratus* **var. n.** *reconvalescens* p. 95 Brazil, OBENBERGER Arch. Natg. **90** A 3.

Polybothris acripes **sp. n.** Madagascar p. 41, GUÉRIN Misc. ent. **28.**

Polycesta californica **subsp. n.** *bernadensis* California p. 35, OBENBERGER Arch. Natg. **90** A 3.

Prospheres aurantiopictus **var. n.** *caledonicus* New Caledonia p. 32, OBENBERGER t.c.

Pseudagrilus alutaceus Abyssinia, *keniae* p. 111, *dubius* B. E. Africa, *madegassus* Madagascar p. 112, *paradiseus* Rhodesia p. 113 **spp. n.**, *granulosus* **varr. n.** *simplex* Natal, *lateritinctus*, **subspp. n.** *transvaalensis* Transvaal, *erythreinus* N. Africa p. 110; *subfasciatus* **var. n.** *chloris* Abyssinia, **ab. n.** *auratus* Nyasaland, **subsp. n.** *usambarae* E. Africa p. 111, OBENBERGER t.c.

Psiloptera esterensis Argentine p. 42, *egeria* Gold Coast p. 44, *tibialis* Tanganyika p. 45, *afra* Benguella, *intermedia* Kilimandjaro p. 47, *sikumbae* S.E. Africa p. 48, *medusa* p. 50, *prognostica* p. 52, *commixta* p. 57 Congo, *gorgo* p. 51, *clymene* p. 58 Usambara, *boera* Transvaal p. 51, *vulcania* p. 52, *strandiana* p. 53, *xenia* p. 57 E. Africa, *chloë*, *nickerli* p. 59, *viridiventris* p. 60, *corinna* p. 61, *eubrachea* (with **var. n.** *diegana*), *suarezina* p. 62, *specialis* p. 63, *salvazai*, *lachesis* p. 64, *cassandra* p. 66 Madagascar, **spp. n.**; *senegalensis* **subsp. n.** *exesula* S.W. Africa, *regulosa* **subsp. n.** *scaphosoma* Senegal, *grandiceps* **subsp. n.** *erythreae* N. Africa p. 43, *subcatenulata* **subsp. n.** *nitidior* Usambara, *limbalis* **var. n.** *aurora* E. Africa p. 46, *albicincta* **var. n.** *gassneri* Abyssinia, *kolbei* **subsp. n.** *ascarica*, *foveicollis* **var. n.** *herera* S.W. Africa p. 48, *placida* **subsp. n.** *njegus* Somaliland, B.E. Africa, Abyssinia p. 49, *quadriareolata* **subspp. n.** *meridei* Transvaal, *ustula* Cameroons, *ornatula*, *ritchiei* E. Africa p. 54, *amaurotica* **subsp. n.** *recens* Transvaal p. 57, *albomarginata* **subspp. n.** *brunnescens* Transvaal, *andersoni* E. Africa p. 58, *complanata* **varr. n.** *nigrina*, *kyselyi*, *aequalipennis* Madagascar p. 65, OBENBERGER t.c.

Ptosima strandi **sp. n.** Cochin China p. 35, OBENBERGER Arch. Natg. **90** A 3.

Rhaeboscelis tenuis see *Paragrilus tenuis.*

Sambus furvus, fouqueti, apicalis, inermipes **spp. n.** Fr. Indo-China p. 261, BOURGOIN Bull. Soc. ent. Fr. **1923.**—*S.* key p. 541, *adonis* Sulu Is. p. 544, *sandakanus* Borneo p. 545, *philippinarum* p. 546, *delicatulus* Philippines p. 547, *bakerianus* Borneo p. 548, *maquilingi* p. 549, *faustinus* Philippines p. 551, **spp. n.** figs., OBENBERGER Phil. J. Sci. **25.**—*S. kannegieteri* Batoe-Tanah Masa I. p. 98, *erimita, fidjiensis* Fiji p. 99, *tonkinensis* Tonkin, *cochinchinae* Cochin China p. 100, *monticola, nickerli* p. 101, *oresitrophus* p. 102 Himalayas, *wendleri* E. India p. 101, *strandi* p. 102, *congolanus* p. 103 Congo, **spp. n.,** OBENBERGER Arch. Natg. **90** A 3.

Sphenoptera (s. str.) *dilaticollis, bousaadensis* Algeria p. 113, (*Paradeudora* **subgen. n.**) *saharensis* Sahara p. 113, (*Chilistetha*) *bonvouloiri* Timbuctu p. 114, (*C.*) *berbera, liauteyi* Algeria p. 115, (*Hoplistura*) *lesneana* Chad p. 116, (*H.*) *olivieri* Arabia p. 117, (*H.*) *tutankhameni* Egypt p. 118, (*H.*) *noeli* Chad p. 118, (*H.*) *bogosina* Abyssinia p. 119, (*H.*) *andresi, klugi* Egypt p. 120, (*H.*) *moises* Sinai p. 121, (*H.*) *heyrovskyi* Egypt p. 122, (*H.*) *tombuctana* Timbuctu p. 122, (*H.*) *nubiae* Nubia p. 123, (*Tropeopeltis*) *deltae* p. 123, (*T.*) *punctisternum* p. 124, (*T.*) *inimica* p. 124, Egypt **spp. n.,** (*T.*) *chalcichroa* **subsp. n.,** *arenosa* Egypt p. 125, OBENBERGER Casopis **20** 1923.

Sternocera, keys and catalogue of African pp. 72–90, THÉRY Bull. Soc. Sci. nat. Maroc **4.**—*S. mrazi* E. Africa p. 25, *rhodesiae* **sp. n.** with **subsp. n.** *septentrionis* p. 26, *coeruleolimbata* Rhodesia, *variabilis* **varr. n.** *dichroa* Nyasaland, *brunneipennis* E. Africa, *melanosoma* Congo, *rufipennis* **var. n.** *suturalis* E. Africa p. 27, *diardi* **subsp. n.** *coelestis* E. India, *wahlbergi* **subsp. n.** *fallatrix* S.W. Africa, *feldspathica* **subspp. n.** *grassatrix* Belgian Congo p. 23, *simpliciventris* Angola, *funebris* **subspp. n.** *polita, ventralis* E. Africa, *reimeri* **subspp. n.** *proditiosa, strandiana* W. Africa p. 24, *orissa* **subspp. n.** *bicolorata* S. Africa, *adversa,* **var. n.** *spoliata* Rhodesia p. 25, OBENBERGER Arch. Natg. **90** A 3.

Stigmodera, corrections in recent revision p. 19, *praeterita* p. 20, *commixta, latipes* p. 21, **spp. n.** N. S. Wales figs., CARTER Proc. Linn. Soc. N.S.W. **49.**

Strigoptera obsoleta **varr. n.** *aliena* p. 32, *destituta* p. 33 Philippines, OBENBERGER Arch. Natg. **90** A 3.

Synechocera cyaneipennis p. 30, *setosa, cupripes* p. 31, **spp. n.** Australia, CARTER Proc. Linn. Soc. N.S.W. **49.**

Tetragonoschema argentiniense **subsp. n.** *wagneri* p. 70, *strandi* **sp. n.** p. 71 Argentine, OBENBERGER Arch. Natg. **90** A 3.

Toxoscelus fuscus **sp. n.** Fr. Indo-China p. 260, BOURGOIN Bull. Soc. ent. Fr. **1923.**—*T. sacer, parvus* **spp. n.** E. India p. 104, OBENBERGER Arch. Natg. **90** A 3.

Trachys brasiliae Brazil, *gestroana* Celebes p. 163, *boettcheri* Philippines, *tonkinensis* p. 164, *nickerli* Tonkin, *preangensis* Java p. 165, **spp. n.,** OBENBERGER Arch. Natg. **90** A 3.—*T.* key pp. 634–639, *T.* (*Habroloma*) *conscripta* p. 639, *speciosella* p. 640, *uniformata* Singapore, *saundersiana* p. 641, *sandakana* p. 642 Borneo, *singaporensis* Singapore p. 643, *bakeriana* p. 644, *dajakorum* p. 645, *praora, miana* p. 646, *T.* (s. str.) *subaeneella* p. 647 Borneo, *scriptella* Singapore p. 648, *fisheri* Mindanao p. 649, *isolata* Penang, *eschscholtzi* Borneo p. 651, *dapitana* Mindanao p. 652, **spp. n.** figs., OBENBERGER Phil. J. Sci. **25.**—*T. corporaali* **sp. n.** Sumatra p. 27, OBENBERGER Treubia **6.**—*T. phlyctaenoides* **var. n.** *veselyi* Caucasus, *fragariae* **var. n.** *thoracalis* Russia, (s. str.) *transcaucasica* p. 57 Transcaucasia, *ogumensis* Japan, **spp. n.,** OBENBERGER Ceskosl ent. spol. Jub. Sbornik **1924.**

Trypantius brasiliensis **sp. n.** Brazil p. 138, OBENBERGER Arch. Natg. **90** A 3.

LUCANIDAE.

Eurytrachelus platymelus **var. n.** *typhoniformis* California p. 72 fig., NAGEL Pan-Pacific Ent. **1.**

Leptinopterus constricticollis **sp. n.** Brazil p. 63 fig., HELLER Ent. Mitt. **13.**

Lucanus cervus, biology pp. 130–133, GRÜTZNER Ent. Jahrb. **33–34.**

COPRIDAE.

Monograph of Phanaeides, D'OLSOUFIEFF Insecta **13** pp. 5–202, 8 pls. 7 maps 40 figs.

Synonymic and other notes on Copridae, D'ORBIGNY Voy. Babault Afr. or. angl. **1916** pp. 1–31 figs.

Copris anomiopseoides **sp. n.** Indo-China p. 210, BOUCOMONT Bull. Soc. ent. Fr. **1924.**

Coprophanaeus **subgen. n.** see *Phanaeus.*

Dendropaemon planus p. 123, *waterhousei* p. 125, *renatii*, *hirticollis* p. 128, *nitidicollis*, *haroldi* p. 130, **spp. n.** figs. Brazil, D'OLSOUFIEFF Insecta **13.**

Liatongus fulvostriatus **sp. n.** B.E. Afr. p. 25 figs., D'ORBIGNY Voy. Babault Afr. or. angl. **1916.**

Megaphanaeus **subgen. n.** see *Phanaeus.*

Metallophanaeus **subgen. n.** see *Phanaeus.*

Onthophagus key to Philippine p. 669, catalogue p. 678, *tagal* pp. 671, 680, *cuneus* pp. 672, 678, *eschscholtzi* pp. 674, 678, *sceptrifer* pp. 676, 680, **spp. n.** Philippines, BOUCOMONT Phil. J. Sci. **24.**—*O. tricuspis* Semenov (= *fortigibber* Reitter), *dayacus* Bouc. (= *siamensis* Bouc.), *cervicapra* Bouc. (= *verecundus* Bouc.), *olsoufieffi* **n.n.** for *penicillatus* Ols. (nec Har.) p. 114, *fasciolatus* **n.n.** for *fasciatus* Orb. (nec Bouc.), *orbus* **n.n.** for *viduus* Lansb. (nec Har.), *lamellatus* **n.n.** for *laminatus* Tasch. (nec Macl.) p. 115, *trituber* **var. n.** *condorensis*, *jacobeus* p. 211, *promontorii* p. 212, **spp. n.**, *aereopictus* **var. n.** *rubropictus*, *saigonensis* **sp. n.** p. 213, Indo-China, BOUCOMONT Bull. Soc. ent. Fr. **1924.**—*O. quadrinodicollis* p. 283, *granicollis* p. 284, **spp. n.** Australia, LEA Proc. Linn. Soc. N.S.W. **49.**

Oxysternon oberthuri Bolivia, Brazil p. 114, *biimpressum* Brazil p. 115, *smaragdinum* Ecuador, *sericeum* Bolivia p. 117, *aeneum* Brazil p. 118, *curvispinum* Ecuador, *striatopunctatum* Brazil p. 119, figs. **spp. n.**, D'OLSOUFIEFF Insecta **13.**

Phanaeus digitalis Guiana p. 84, *sculpturatus* Brazil p. 87, *blanchardi* Colombia, Ecuador p. 92, *floridanus* Florida p. 94, *niger* Louisiana p. 95, *tricornis* Mexico p. 105, **spp. n.**, (*Coprophanaeus* **subgen. n.**) *cyanescens* Brazil p. 65, *christophorowi* Fr. Guiana, *costatus* Brazil p. 66, *parvulus* Fr. Guiana p. 67, *arrowi* p. 68, *pertyi*, *obscurus*, *punctatus* p. 71 Brazil, *conocephalus* Ecuador p. 72, *chiriquensis* Panama p. 73, **spp. n.**, (*Metallophanaeus* **subgen. n.**) for *saphirinus* Strm. and *horus* Wth. p. 74, (*Megaphanaeus* **subgen. n.**) for *bonariensis* Gory, *ensifer* Germ., *lancifer*, L., *bellicosus* Ol., p. 75, (*Sulcophanaeus* **subgen. n.**) for *sulcatus* Drury & *steinheili* Har., p. 78 figs., D'OLSOUFIEFF Insecta **13.**

Sulcophanaeus **subgen. n.** see *Phanaeus.*

Taurocopris **gen. n.** for *Phanaeus mirabilis* Har., *mimas* L., *cadmus* Har. p. 61, D'OLSOUFIEFF Insecta **13.**

APHODIIDAE.

Aphodius (*Colobopterus*) *erraticus* **var. n.** *zighanica* p. 66, (*Nialus*) *varians* **ab. n.** *purpurascens*, (*Volinus*) *inquinatus* **ab. n.** *striatulus*, (*Melinopterus*) *prodromus* **abb. n.** *lunulatus*, *obscurus* p. 67, Caucasus, EICHLER Polsk. Pismo ent. **3.**

Ataenius corporaali **sp. n.** Sumatra p. 118, BOUCOMONT Tijd. Ent. **67.**

Plagiogonus arcuatus **var. n.** *buyssoni* France p. 42, DAUPHIN Misc. ent. **28.**

Saprosites rufopolitus p. 103, *mjöbergi* p. 104, **spp. n.** Sumatra, GILLET Ann. Soc. ent. Belg. **64.**

GEOTRUPIDAE.

Bolbocerosoma pusillum p. 11, *biplagiatum* p. 12, *bruneri* p. 14 **spp. n.** N. America, DAWSON & MCCOLLOCH Can. Ent. **56.**

Bolboceras leai **n.n.** for *interruptum* Lea (nec Kolbe), *ludekingi* Lansb. (= *walshi* Pouill.), *catenatus* Lansb. (= *niger* Pouill.) p. 115, BOUCOMONT Bull. Soc. ent. Fr. **1924.**—*B. tricavicolle* p. 284, *corrugatum* p. 285 **spp. n.** Australia, LEA Proc. Linn. Soc. N.S.W. **49.**

Eucanthus tricarinaticeps **sp. n.** Australia p. 286, LEA Proc. Linn. Soc. N.S.W. **49.**

Geotrupes, food of German pp. 20–27, VATERNAHN Zs. wiss. Insektenbiol. **19.**

Thorectes armifrons, *trituberculatus* further described p. 18, SIRGUEY EICHLER Polsk. Pismo ent. **3.**

GLAPHYRIDAE.

Amphicoma arctos **abb. n.** *flavipilis* p. 67, *sadachica* p. 68, Caucasus, EICHLER Polsk. Pismo ent. **3.**

MELOLONTHIDAE.

Ablaberoides schwetzi **sp. n.** Belgian Congo p. 168, MOSER D. ent. Zs. **1924.**

Allokotarsa nigriceps **sp. n.** E. Africa p. 142, MOSER Stett. ent. Ztg. **84.**

Anoplosiagum sulcatulum **var. n.** *setosellum* Sao Paulo p. 123, MOSER t.c.

Anoxia villosa sound production p. 180, BAUDRIMONT Proc.-verb. Soc. linn. Bordeaux **75** 1923.

Apogonia rudepunctata Borneo p. 131, *corporaali* Java p. 132 **spp. n.,** MOSER Stett. ent. Ztg. **84.**—*A. imugana* p. 349, *callosifrons, banosana, tangcolana* p. 350, *latitarsis, benguetana, nigripennis* p. 351, *polisana, surigaoana, maculipennis* p. 352, *angustipes, philochlaenioides* p. 353, *griseosquamosa* p. 354, **spp. n.** Philippines, MOSER Phil. J. Sci. **25.**

Astaena bruchi Argentina, *truncaticeps* Brazil **spp. n.** p. 120, MOSER Stett. ent. Ztg. **84.**

Athlia bruchi **sp. n.** Argentina p. 121, MOSER t.c.

Aulacoserica schoutedeni, rufocastanea **spp. n.** Belgian Congo p. 163, MOSER D. ent. Zs. **1924.**—*A. antennalis* **sp. n.** E. Africa p. 143, MOSER Stett. ent. Ztg. **84.**

Aulanota **gen. n.** *sulcipennis* **sp. n.** Brazil p. 157, MOSER Stett. ent. Ztg. **84.**

Autoserica rufiventris **sp. n.** Belgian Congo p. 162, MOSER D. ent. Zs. **1924.**—*A. opaca* Old Calabar, *opacula* Kamerun p. 114, *seydeli* Belgian Congo, *methneri* p. 137, *microchaeta* E. Africa p. 138 **spp. n.,** MOSER Stett. ent. Ztg. **84.**

Blepharotoma petropolisana **sp. n.** Rio de Janeiro p. 158, MOSER t.c.

Brahmina kurseongana **sp. n.** Kurseong p. 132, MOSER t.c.

Camenta antennalis **sp. n.** E. Africa p. 147, MOSER t.c.—*C. rufocastanea* **sp. n.** Belgian Congo p. 166, MOSER D. ent. Zs. **1924.**

Ceraspis zikani Brazil, *squamulata* Paraguay **spp. n.** p. 131, MOSER Stett. ent. Ztg. **84.**

Chiloschiza **gen. n.** *clypealis* **sp. n.** E. Africa p. 153, MOSER t.c.

Chlorochiton (= *Neostethaspis* Dalla Torre nom. nud.) key, *longicornis* p. 550, *laevis* p. 551 **spp. n.** N. Zealand, ARROW Ann. Mag. N. H. (9) **13.**

Clavipalpus vestitus, castaneus, rimbachi **spp. n.** Ecuador p. 123, MOSER Stett. ent. Ztg. **84.**

Corminus rufofuscus **sp. n.** Brazil p. 162, MOSER t.c.

Costleya key p. 552, *lineata* **sp. n.** N. Zealand p. 553, ARROW Ann. Mag. N. H. (9) **13.**

Ctilocephala ohausi **sp. n.** Ecuador p. 127, MOSER Stett. ent. Ztg. **84.**

Dichelomorpha medana **sp. n.** Sumatra p. 134, MOSER t.c.

Dicheloschema **gen. n.** *corporaali* **sp. n.** Sumatra p. 135, MOSER t.c.

Diphucephala parviceps p. 293, *cribripennis, macrops* p. 294, **spp. n.** Australia, LEA Proc. Linn. Soc. N.S.W. **49.**

Empecamenta lobata **sp. n.** Belgian Congo p. 167, MOSER D. ent. Zs. **1924.**—*E. methneri, sinuaticeps* **spp. n.** E. Africa p. 148, MOSER Stett. ent. Ztg. **84.**

Glaphyronyx **gen. n.** *bayeri* **sp. n.** Belgian Congo p. 170, MOSER D. ent. Zs. **1924.**

Haplonycha fimbricollis, fimbripennis p. 305, *tarsalis* p. 306, *pallida, pulchripennis* p. 307, *fimbriata* p. 308, **spp. n.** Australia, LEA Proc. Linn. Soc. N.S.W. **49.**

Harpodactyla aenea p. 121, *lutea* p. 157, **spp. n.** Brazil, MOSER Stett. ent. Ztg. **84.**

Hercitis flavosquamosa **sp. n.** Minas Geraes p. 128, MOSER t.c.

Heteronyx harpalinus **n.n.** for *Neoheteronyx lividus* Blackb.; *brevicollis* Blackb. (= *coxalis* Blackb.) p. 296, *cribrifrons* p. 298, *tridentatus, clypealis* p. 299, *phanophilus* p. 300, *brevicoxis* p. 301, *inconstans, noctivagus* p. 302, *transversopolitus* p. 303, *unidentatus* p. 304 **spp. n.** Australia, LEA Proc. Linn. Soc. N.S.W. **49.**—*H. fimbriatus* **n.n.** for *H. ciliatus* Mos. (nec Boisd.) p. 121, *magnus* p. 162, *castanescens* p. 163 **spp. n.** Dutch New Guinea, MOSER Stett. ent. Ztg. **84.**

Holotrichia imugana p. 354, *banahaoensis*, *bakeri* p. 355, **spp. n.** Philippines, MOSER Phil. J. Sci. **25**.

Hoplia luzonica, *griseovestita* **spp. n.** Philippines p. 356, MOSER t.c.—*H. tangana* E. Africa, *brastagiensis* p. 135, *corporaali* Sumatra **spp. n.**, *tuberculifera* **n.n.** for *bituberculata* Mos. from Yunnan (nec Mos. from Borneo) p. 136, *sibuyana* **sp. n.** Philippines p. 164, MOSER Stett. ent. Ztg. **84**.

Hybocamenta rufopilosa **sp. n.** Belgian Congo p. 166, MOSER D. ent. Zs. **1924**.—*H. urunguensis* **sp. n.** E. Africa p. 149, MOSER Stett. ent. Ztg. **84**.

Isonychus aequatorialis p. 124, *pilicollis*, *ruficeps*, *fasciatipennis* p. 125, *angosturanus*, *tristis*, *discolor* p. 126, **spp. n.** S. America, MOSER t.c.

Lachnosterna (*Phyllophaga*) *taxodii* **sp. n.** p. 449, *micans* **var. n.** *cupuliformis* p. 450, Mississippi fig., LANGSTON Ann. Ent. Soc. Amer. **17**.—*L. microchaeta* p. 154, *subrugosa* Mexico, *parvicornis* Guatemala p. 155, *rufipes*, *pastassana* Ecuador p. 156, *manaosana* Amazons p. 157, **spp. n.**, MOSER Stett. ent. Ztg. **84**.—*L.* (*Phyllophaga*) *crinitissima* **sp. n.** Porto Rico p. 105, WOLCOTT J. Dept. Agric. P. R. **7**.

Lepidiota corporaali **sp. n.** Dutch New Guinea p. 154, MOSER Stett. ent. Ztg. **84**.—*L. trichosterna* p. 309, *platyura rugosipennis* p. 310, **spp. n.** Australia, LEA Proc. Linn. Soc. N.S.W. **49**.

Lepidostethaspis **gen. n.** for *Stethaspis squamosus* Lea p. 547, ARROW Ann. Mag. N. H. (9) **13**.

Leucopholis bakeri, *reflexa* **spp. n.** Philippines p. 354, MOSER Phil. J. Sci. **25**.

Liogenys minutus, *bruchi*, *flaveolus* **spp. n.** Argentina p. 122, MOSER Stett. ent. Ztg. **84**.

Liparetrus cribriceps p. 286, *tarsalis* p. 287, *bilobus*, *longipilis* p. 288, *orthodoxus*, *piliceps* p. 289, *cribripennis*, *geminatus* p. 290, *tibialis*, *clypealis* p. 291 **spp. n.** Australia, LEA Proc. Linn. Soc. N.S.W. **49**.

Macrodactylus marianus **sp. n.** Colombia p. 124, MOSER Stett. ent. Ztg. **84**.

Madotrogus palpalis **sp. n.** India p. **133**, MOSER t.c.

Maechidius puncticollis p. 292, *eutermiphilus* p. 293, **spp. n.** Australia, LEA Proc. Linn. Soc. N.S.W. **49**.

Manoserica **gen. n.** for *Serica disparicornis* Qued. Belgian Congo p. 162, MOSER D. ent. Zs. **1924**.

Melanocamenta variipennis p. 167, *bicolorata* p. 168, **spp. n.** Belgian Congo, MOSER t.c.

Microserica splendida p. 115, *batoeensis* p. 116 Sumatra, Batoe Is., *panayana* Panay p. 139, *seticeps* Sumatra p. 140, **spp. n.**, MOSER Stett. ent. Ztg. **84**.

Microtrichia mindanaoensis **sp. n.** Philippines p. 356, MOSER Phil. J. Sci. **25**.

Microtrochalus hexaphyllus **sp. n.** E. Africa p. 146, MOSER Stett. ent. Ztg. **84**.

Neoheteronyx lividus Blkb. see *Heteronyx harpalinus*.

Neoserica setipennis p. 138, *ciliatipennis* p. 139 **spp. n.** E. Africa, MOSER Stett. ent. Ztg. **84**.—*N. opacula* **sp. n.** Philippines p. 349, MOSER Phil. J. Sci. **25**.

Neostethaspis see *Chlorochiton*.

Neuroserica unguiculata Tanganyika p. 115, *usambarica* Usambara p. 140 **spp. n.**, MOSER Stett. ent. Ztg. **84**.

Onychoserica citrina **sp. n.** E. Africa p. 142, MOSER t.c.

Paraheteronyx **gen. n.** *quadriflabellatus* **sp. n.** Dutch New Guinea p. 163, MOSER t.c.

Philochlaenia zikani Brazil p. 124, *cordobana* Argentina, *nigrita* p. 158, *densevestita* p. 160, *antennalis*, *cinereopilosa* p. 161 Brazil, *sparsesetosa* Guiana, *griseosetosa* Colombia p. 159, *lojana*, *witti* p. 160, *archidonensis* p. 161 Ecuador **spp. n.**, MOSER t.c.

Phyllophaga see *Lachnosterna*.

Pimelomera **gen. n.** p. 169, *schwetzi* **sp. n.** Belgian Congo p. 170, MOSER D. ent. Zs. **1924**.

Plectris bruchi, *brevipilosa* p. 128, *griseosetosa*, *setosa*, *maculipennis* p. 129, *pauloana*, *paraguayensis* p. 130, **spp. n.** S. America, MOSER Stett. ent. Ztg. **84**.

Polyphylla fullo sound production p. 174 fig., BAUDRIMONT Proc. verb. Soc. linn. Bordeaux **75** 1923.

Pseudocongella **gen. n.** p. 163, *methneri* **sp. n.** E. Africa p. 164, MOSER Stett. ent. Ztg. **84.**

Pseudotrochalus tridenticeps p. 165, *densicollis* p. 166, **spp. n.** Belgian Congo, MOSER D. ent. Zs. **1924.**—*P. congoensis* Congo p. 119, *seriatipennis, piceoniger* p. 144, *validipes, urunguensis* p. 145, *nigrofuscus* p. 146 **spp. n.** E. Africa, MOSER Stett. ent. Ztg. **84.**

Rhinaspis rugicollis, dilaticornis, fusca **spp. n.** Brazil p. 127, MOSER t.c.

Rhyxiderma **gen. n.** *celebensis* **sp. n.** Celebes p. 133, MOSER t.c.

Schizonycha rodhaini, kabindana **spp. n.** Belgian Congo p. 169, MOSER D. ent. Zs. **1924.**—*S. muansana, callosicollis* p. 149, *crenicollis, genitalis* p. 150, *puguensis, crenulata, ferrugineipennis* p. 151, *sinuaticeps, squamulifera* p. 152, *kirumbana* p. 153, **spp. n.** E. Africa, MOSER Stett. ent. Ztg. **84.**

Serica disparicornis Qued. see *Manoserica.*

Sphaerotrochalus brunneus Congo p. 119, *tristis* E. Africa p. 147 **spp. n.**, MOSER Stett. ent. Ztg. **84.**

Stethaspis key p. 548, *dispar* **sp. n.** Tasmania p. 549, ARROW Ann. Mag. N. H. (9) **13.**—*S. squamosus* Lea see *Lepidostethaspis.*

Symmela costaricensis Costa Rica p. 119, *bruchi* Argentina p. 120 **spp. n.**, MOSER Stett. ent. Ztg. **84.**

Synclitopa laeviceps **sp. n.** Zambesi p. 134, MOSER t.c.

Tarsocamenta **gen. n.** *kapiriana* **sp. n.** Belgian Congo p. 168, MOSER D. ent. Zs. **1924.**

Triodonta ferruginea p. 140, *flavipennis, signaticollis* p. 141, *uhana* p. 142 **spp. n.** E. Africa, MOSER Stett. ent. Ztg. **84.**—*T. congoana* p. 162, *murina* p. 163, **spp. n.** Belgian Congo, MOSER D. ent. Zs. **1924.**

Trochaloserica testaceipennis **sp. n.** E. Africa p. 147, MOSER Stett. ent. Ztg. **84.**

Trochalus schoutedeni, kwiluensis, maynei p. 164, *calanus* p. 165, **spp. n.** Belgian Congo, MOSER D. ent. Zs. **1924.**—*T. zambesianus* p. 116, *mwikanus, flavicornis, longicornis* p. 117 E. Africa, *tridentatus* N. Rhodesia, *fulvicolor* Congo p. 118, *urunguensis* p. 143, *salaamus* p. 144 E. Africa, **spp. n.**, MOSER Stettin. ent. Ztg. **84.**

RUTELIDAE.

Adoretus maculatus **sp. n.** Tanganyika p. 228, BENDERITTER Bull. Soc. ent. Fr. **1924.**

Anomala hirtipyga Rhodesia, *nigrosuturata* Fort Sibut, **spp. n.** p. 227, BENDERITTER Bull. Soc. ent. Fr. **1924.**—*A. kansana* **sp. n.** Kansas p. 139, HAYES & MCCOLLOCH Ent. News **35**; biology pp. 589–594 fig., ID. J. Econ. Ent. **17.**—*A. vigilax, apogonioides* p. 53, *quadricalcarata,* (*Spilota*) *moseri* p. 54, **spp. n.** Philippines, OHAUS Phil. J. Sci. **24.** — *A. exaratior* p. 167, *lissopyga* p. 170 Philippines, *susca, colma, melattia* Sumatra p. 168, *menadensis* Celebes, *kannegieteri* Batu Is. p. 169 **spp. n.** fig., OHAUS Stett. ent. Ztg. **84.**—*A.* (*Diplomala*) *quelparta* **sp. n.** Quelpart Island p. 177 fig., OKAMOTO Bull. Agric. Expt. Sta. Govt. Gen. Chosen **1.**

Anoplognathus smaragdinus Ohs. (= *Calloodes translucidus* Bend.) p. 137, BENDERITTER Bull. Soc. ent. Fr. **1924.**

Anoplostethus laetus **var. n.** *nobilis* p. 137, BENDERITTER t.c.

Aprosterna punctipennis Belgian Congo, *studiosa* Uganda p. 226, **spp. n.**, BENDERITTER t.c.

Calloodes translucidus Bend. see *Anoplognathus smaragdinus* Ohs.

Calopopillia mpalaensis **sp. n.** Tanganyika p. 137, BENDERITTER t.c.

Chaetadoretus hispidus **sp. n.** Nieuwdorp p. 228, BENDERITTER t.c.

Euchlora cupriventris **sp. n.** Philippines p. 103 fig., OHAUS Phil. J. Sci. **24.**

Geniates octavius **sp. n.** Brazil p. 185 fig., OHAUS Stett. ent. Ztg. **84.**

Gnatholabis sexmaculata see *Trichopopillia.*

Leucothyreus melzeri p. 179, *hoffmanni, pallefactus* p. 180, *michaelisi, serripes* p. 181, *verticalis* p. 182, *stibeutes* p. 183, *sparsepilosus, conquisitor* p. 184 **spp. n.** S. America figs., OHAUS Stett. ent. Ztg. **84.**

Malaia crassipes **sp. n.** Sangir Isl. p. 177, OHAUS t.c.

Mimela pirosca p. 170, *dimorpha* p. 171, **spp. n.** Java figs., OHAUS t.c.

Popillia spinipennis **sp. n.** Congo p. 136, BENDERITTER Bull. Soc. ent. Fr. **1924.**—*P. quelpartiana* Quelpart Is. p. 172, *varicolor* N. Luzon, *dajaka* Borneo p. 174 **spp. n.** fig., OHAUS Stett. ent. Ztg. **84.**

Plusiotis strasseni **sp. n.** Honduras pp. 185–186, OHAUS Senckenbergiana Frankfort on M. **6** 1924.

Spilota bugnioni **sp. n.** Ceylon p. 122, GILLET Spol. Zeyl. **13.**

Trichopopillia sexmaculata erroneously included in *Gnatholabis* p. 137, BENDERITTER Bull. Soc. ent. Fr. **1924.**

DYNASTIDAE.

Aphonus ingens p. 334, *scutellaris* p. 335, **spp. n.** U.S.A., CASEY Mem. Col. **11.**

Heteronychus revision of African, key p. 386, *vixstriatus* p. 400, *abyssinicus* p. 402, *angolensis* p. 412, *impudens* p. 414, *andersoni* p. 421, *foveolatus* p. 424, *simulans* p. 430, *puncticollis* p. 432, *insignificus* p. 436, **spp. n.** Africa figs., JACK Trans. Ent. Soc. **1923.**

Ligyrodes dawsoni **sp. n.** Nebraska p. 334, CASEY Mem. Col. **11.**

Megasoma elephas, monograph 21 pp. fig., HERRERA Dir. Estud. biol. Mexico **1922.**

Oryctes nasicornis abnormalities pp. 37–38, LUIGIONI Atti Pont. Accad. Nuovi Lincei **77.**

Pseudaphonus puncticollis **sp. n.** Colorado p. 335, CASEY Mem. Col. **11.**

Scaptophilus dasypleurus, abnormal tarsus p. 242 fig., DALLAS Physis **7.**

Strategus mormon biology Kansas p. 142, KNAUS J. N. Y. Ent. Soc. **32.**

CETONIIDAE.

Synonymic and other notes on Cetoniini, BOURGOIN Voy. Babault Afr. or. angl. **1921** pp. 1–44 figs.

Cetoniidae of Belgian Congo, BURGEON Ann. Soc. ent. Belg. **64** pp. 109–129.

Bothrorrhina gerardi **sp. n.** Madagascar p. 153, BOURGOIN Bull. Soc. ent. Fr. **1924.**

Cacochroa gymnopleura **var. n.** *fuscosuturalis* Australia p. 311, LEA Proc. Linn. Soc. N.S.W. **49.**

Callynomes donckieri Yunnan, *vitalisi* Laos **spp. n.** p. 138, BOURGOIN Bull. Soc. ent. Fr. **1924.**

Coelodera vitalisi **sp. n.** Annam p. 137, BOURGOIN t.c.

Coenochilus angustulus sp. n. Belgian Congo p. 165, MOSER Stett. ent. Ztg. **84.**

Eccoptocnemis babaulti p. 15, *albini* p. 16 **spp. n.** B.E. Afr., BOURGOIN Voy. Babault Afr. or. angl. **1921.**

Epicometis squalida, mouth-parts pp. 46–52 fig., ZANON Atti Pont. Accad. Nuovi Lincei **77.**

Euchroea nigrostellata **sp. n.** Madagascar p. 149, JANSON Ent. Mo. Mag. **60.**

Genyodonta interrupta **sp. n.** B. E. Afr. p. 18, BOURGOIN Voy. Babault Afr. or. angl. **1921.**

Gnathocera propinqua **sp. n.** B. E. Afr. p. 21, BOURGOIN t.c.

Gnorimus nobilis **var. n.** *cyaneoviolaceus* Italy p. 46, MANCINI Boll. Soc. ent. ital. **56.**

Incala schoutedeni **sp. n.** Belgian Congo p. 165, MOSER Stett. ent. Ztg. **84.**

Lomaptera fasciata **sp. n.** Dutch New Guinea p. 165, MOSER t.c.

Macronota cupreicollis Annam, *simillima, salvazai, soror* Laos p. 153, **spp. n.**, BOURGOIN Bull. Soc. ent. Fr. **1924.**

Pachnoda albini p. 26, *babaulti* p. 28, **spp. n.** B. E. Afr. figs., BOURGOIN Voy. Babault Afr. or. angl. **1921.**—*P. bourgeoni* **sp. n.** Belgian Congo p. 171, MOSER D. ent. Zs. **1924.**

Pogonotarsus gerardi **sp. n.** Madagascar p. 138, BOURGOIN Bull. Soc. ent. Fr. **1924.**

Potosia cuprea **var. n.** *nigrifulgens* Italy p. 46, MANCINI Boll. Soc. ent. ital. **56.**

Pseudinca variatus p. 33, *vitticollis* p. 35, **spp. n.** B. E. Afr. fig., BOURGOIN Voy. Babault Afr. or. angl. **1921.**

Stichothyrea mutabilis **sp. n.** B. E. Afr. p. 39, BOURGOIN t.c.

Tetraodorrhina flavescens **sp. n.** Madagascar p. 149, JANSON Ent. Mo. Mag. **60.**

TENEBRIONIDAE.

Habits of some Tenebrionid beetles, BUXTON Ent. Mo. Mag. **60** p. 3.

Synonymic and other notes on Australian Tenebrionidae, CARTER Proc. Linn. Soc. N.S.W. **49** p. 32.

The larvae of N. American Tenebrioninae, ST. GEORGE Proc. U. S. Nat. Mus. **65** art. 1 pp. 1–22.

Adesmia zanoni **sp. n.** Cyrenaica p. 16, SCHUSTER Mem. Soc. ent. ital. **1** 1922.

Akis gestroi **sp. n.** Cyrenaica p. 18, SCHUSTER t.c.

Alaephus convergens, madarensis p. 324, *gracilicornis, longicornis* p. 325, *quadricollis* p. 326, **spp. n.** U.S.A., CASEY Mem. Col. **11.**

Allophylax rotundicollis **sp. n.** Tunisia p. 219, CHOBAUT Bull. Soc. ent. Fr. **1924.**

Amarygmus adonis **subsp. n.** *subelongatus, lacanus* Tonkin, *violaceonotatus* Annam **spp. n.** p. 28, PIC Mél. exot. ent. **41.**

Ammogiton peltieri **sp. n.** W. Sahara p. 75 fig., PEYERIMHOFF Bull. Soc. ent. Fr. **1924.**

Amphidora parallela **sp. n.** Calif. p. 328, CASEY Mem. Col. **11.**

Anacycus violaceopunctatus Sumatra, *gianganus* Tonkin **spp. n.** p. 29, PIC Mél. exot. ent. **41.**

Anamphidora **gen. n.** *parvula* **sp. n.** Mexico p. 320, CASEY Mem. Col. **11.**

Apterotheca punctipennis **sp. n.** p. 38, key p. 39 Australia fig., CARTER Proc. Linn. Soc. N.S.W. **49.**

Argoporis angusta, lateralis p. 331, *hebes, tibialis, tuckeri* p. 332 **spp. n.** N. America, CASEY Mem. Col. **11.**

Artactes minimus Banguey Is., *sparsepunctatus* Borneo, *latipes* Sumatra **spp. n.**; *nitidiceps* and *cyaneus* Frm. see *Macroartactes* p. 24, PIC Mél. exot. ent. **41.**

Basanomorphus 4-maculatus **var. n.** *junctus* Sumatra p. 25, PIC t.c.

Blaps doderoi **sp. n.** Cyrenaica p. 21, SCHUSTER Mem. Soc. ent. ital. **1** 1922.

Bothrotes pinorum **sp. n.** N. Carolina p. 304, CASEY Mem. Col. **11.**

Caedius auriculatus **sp. n.** Algeria p. 154, CHOBAUT Bull. Soc. ent. Fr. **1924.**

Camaria cyanescens (with **varr. n.** *viridipes, incyanea*), *diversiceps, biimpressa* **spp. n.** Brazil p. 10, PIC Mél. exot. ent. **42.**

Centrioptera texana **sp. n.** Texas p. 88, BLAISDELL Pan-Pacific Ent. **1.**—*C. serrata, elongata* **spp. n.** U.S.A. p. 306, CASEY Mem. Col. **11.**

Chalcopterus lucidus, praetermissus **spp. n.** Australia p. 42, CARTER Proc. Linn. Soc. N.S.W. **49.**

Chariothes doddi **sp. n.** Queensland p. 38, CARTER t.c.

Cibdelis ventricosa p. 322, *cylindrica* p. 323, **spp. n.** Calif., CASEY Mem. Col. **11.**

Cleteus pubescens **sp. n.** Madagascar p. 3, PIC Mél. exot. ent. **41.**

Coelocnemis columbiana p. 314, *rauca, ovipennis* p. 315, *utensis, spaldingi, basalis, caudicalis* (with **subsp. n.** *deserta*) p. 316, *antennalis* p. 317, *idahoensis, aequalis, smithiana* p. 318, *rotundicollis, longicollis* p. 319, *angusta* p. 320, **spp. n.** N. America, CASEY Mem. Col. **11.**

Colophotia bakeri **sp. n.** Philippines p. 712, PIC Phil. J. Sci. **25.**

Coniontis globulina **var. n.** *ventura* p. 83, *lamentabilis* **sp. n.** p. 85, *nemoralis* **var. n.** *slevini* p. 86, California, BLAISDELL Pan-Pacific Ent. **1.**—*C. wadei* **sp. n.** Washington State p. 313, CASEY Mem. Col. **11.**

Conipinus spaldingi **sp. n.** Nevada p. 313, CASEY Mem. Col. **11.**

Copidita nigroapicalis, hahneli, pallidovittata, laticollis, wagneri S. America p. 21, *toliana* Celebes, *infranigra, notatithorax* New Guinea, *carolinensis, semialutacea* Caroline Is. p. 22, (*Lycopodita* **subgen. n.**) *lyciformis* Brazil p. 21 **spp. n.**, PIC Mél. exot. ent. **42.**

Cratidus ovipennis **sp. n.** Calif. p. 328, CASEY Mem. Col. **11.**

Cryptoglossa laevis **subsp. n.** *subsimilis* Arizona p. 308, CASEY t.c.

Cypostethe angulosicolle **sp. n.** Algeria p. 166, CHOBAUT Bull. Soc. ent. Fr. **1924.**

Diaphanes costulatus **var. n.** *pallidipes* B. E. Afr. p. 6, PIC Voy. Babault Afr. or. angl. **1921.**

Dodecatoura testaceiceps **sp. n.**, Philippines p. 713, PIC Phil. J. Sci. **25.**

Ebenolus banksi p. 43, *minor* p. 44, **spp. n.** Banks Island, CARTER Proc. Linn. Soc. N.S.W. **49.**

Echocerus cornutus biology pp. 572–577, SHEPHERD J. Econ. Ent. **17.**

Edrotes laticollis, longicornis p. 300, *variipilis* p. 301, **spp. n.** U.S.A., CASEY Mem. Col. **11.**

Eulabis montana **sp. n.** Cal. p. 330, CASEY t.c.

Eupezus crampeli Fr. Congo, *major* Kamerun p. 9, *punctatus* Ivory Coast p. 10 **spp. n.**, PIC Mél. exot. ent. **42.**

Eupsophulus brevipennis **sp. n.** Arizona p. 323, CASEY Mem. Col. **11.**

Eusattus quadratus p. 311, *subvelutinus, woodgatei* p. 312, **spp. n.** New Mexico, CASEY t.c.

Euschides oblongus, oregonensis **spp. n.** U.S.A. p. 309, CASEY t.c.

Eutoreuma minor **sp. n.** Queensland p. 37, CARTER Proc. Linn. Soc. N.S.W. **49.**

Eutriorophus **gen. n.** p. 296, *tuckeri* **sp. n.** Arizona p. 297, CASEY Mem. Col. **11.**

Falsodiopethes **gen. n.** (near *Diopethes* Pasc.), *gounellei* **sp. n.** Brazil p. 12, PIC Mél. exot. ent. **42.**

Foochounus rectus **sp. n.** Tonkin p. 26, PIC Mél. exot. ent. **41.**

Haplandrus subangusta, collaris **spp. n.** U.S.A. p. 320, CASEY Mem. Col. **11.**

Helops carolina **sp. n.** N. Carolina p. 40, MANEE Bull. Brooklyn Ent. Soc. **19.**

Hemicera subelongata Laos, *impressithorax* Tonkin p. 26, *violaceopunctata* Laos p. 28, **spp. n.**, PIC Mél. exot. ent. **41.**

Heterocheira tropica **sp. n.** Queensland p. 33, CARTER Proc. Linn. Soc. N.S.W. **49.**

Hoplocephala tonkinea **sp. n.** Tonkin p. 25, PIC Mél. exot. ent. **41.**

Hypophloeus laeviceps, brunneicollis Tonkin, *atrofasciatus* Los Baños **spp. n.** p. 29, PIC t.c.—*H. gabonicus, atropygus, rufolineatus* Africa (West Coast), *curtithorax* Sumatra p. 14, *subalutaceus* Madagascar p. 15 **spp. n.**, PIC op. cit. **42.**

Immedia lineata p. 11, *undulata, auratopunctata, diversa* p. 12, **spp. n.** Brazil, PIC t.c.

Iphthimus salebrosus **sp. n.** Br. Columbia p. 327, CASEY Mem. Col. **11.**

Licinoma puncticeps, umbilicata **spp. n.** Australia p. 41, CARTER Proc. Linn. Soc. N.S.W. **49.**

Lobometopon tuckeri p. 301, *alticola, woodgatei* p. 302, *juabense, provoanum* p. 303, **spp. n.** U.S.A., CASEY Mem. Col. **11.**

Luciola bicoloriceps **sp. n.** Philippines p. 712, PIC Phil. J. Sci. **25.**

Lycopodita **subgen. n.** see *Copidita.*

Lyphia elongata Tonkin, *substriata* Celebes, *instriata* New Guinea p. 15, *punctaticeps* Lombok p. 16 **spp. n.**, PIC Mél. exot. ent. **42.**

Macroartactes **gen. n.** (near *Artactes*) for *A. nitidiceps* Frm. & *A. cyaneus* Frm. p. 24, *costulatus* Java, *alutaceus* Sumatra **spp. n.** p. 25, PIC op. cit. **41.**

Menephilus pulcher **sp. n.** Queensland p. 36, CARTER Proc. Linn. Soc. N.S.W. **49.**

Merinus laevis early stages pp. 12–22 fig., ST. GEORGE Proc. U. S. Nat. Mus. **65** art. 1.

Micrositus globosus **sp. n.** Morocco p. 374, ESCALERA Bol. R. Soc. esp. H. n. **24.**

Notoprataeus **gen. n.** *litoralis* **sp. n.** Queensland p. 37, CARTER Proc. Linn. Soc. N.S.W. **49.**

Nototrintus **gen. n.** type *Otrintus jacksoni, hackeri* **sp. n.** Australia, key p. 40 fig., CARTER t.c.

Nyctozoilus crassus, pusillus **spp. n.** Queensland p. 35 fig., CARTER t.c.

Otrintus jacksoni see *Nototrintus.*

Palorus crampeli **sp. n.** Fr. Congo p. 26, PIC Mél. exot. ent. **41.**

Paraphylax virius larva described p. 342 fig., HUDSON Trans. N. Z. Inst. **55.**

Pelecyphorus uteanus **sp. n.** Utah p. 308, CASEY Mem. Col. **11.**

Pimelia bengaskina **sp. n.** Cyrenaica p. 20, SCHUSTER Mem. Soc. ent. ital. **1** 1922.

Platydema sulcatopunctatum further description p. 32, CARTER Proc. Linn. Soc. N.S.W. **49.**

Poecilesthus seileri **sp. n.** Colombia p. 11, PIC Mél. exot. ent. **42.**

Polopinus **gen. n.** type *Polypleurus nitidus* Lec. p. 326, **subspp. n.** *subdepressus, brevior* ; *ingens* **sp. n.** Florida p. 327, CASEY Mem. Col. **11.**

Polypleurus nitidus see *Polopinus.*

Pseudephalus **gen. n.** *brevicornis* **sp. n.** Alabama p. 333, CASEY Mem. Col. **11.**

Pseudoblapida atritarsis **sp. n.** Colombia p. 10, PIC Mél. exot. ent. **42.**

Pseudoenanea **gen. n.** (near *Enanea*) *robusta* **sp. n.** Tonkin p. 25, PIC op. cit. **41.**

Psydomorphus striatus **sp. n.** Tonkin p. 27, PIC op. cit. **41.**

Psydus viridicinctus **sp. n.** Tonkin p. 27, PIC op. cit. **41.**

Redistes **gen. n.** *cylindricus* **sp. n.** N. Carolina p. 181, CASEY Mem. Col. **11.**

Reminius **gen. n.** p. 321, *ocularis* **sp. n.** N. America p. 322, CASEY t.c.

Saragus punctatus **sp. n.** N. S. Wales p. 34, CARTER Proc. Linn. Soc. N.S.W. **49.**

Schizillus opacus **sp. n.** Nevada p. 307, CASEY Mem. Col. **11.**

Scutopiloxys **gen. n.** (near *Piloxys* Frm.) p. 13, *perroti* **sp. n.** p. 14 Madagascar, PIC Mél. exot. ent. **42.**

Sphaeriontis latissima, fulvescens **spp. n.** Cal. p. 310, CASEY Mem. Col. **11.**

Sphaerotus diversus, rufimembris **spp. n.** Brazil p. 11, PIC Mél. exot. ent. **42.**

Stenosis mamorensis **sp. n.** Morocco p. 149 fig., THÉRY Bull. Soc. Sci. nat. Maroc **4.**

Stenotrichus confluens **sp. n.** Calif. p. 329, CASEY Mem. Col. **11.**

Strongylium vertebrale **sp. n.** Queensland p. 43, CARTER Proc. Linn. Soc. N.S.W. **49.**—*S. purpureipes* **sp. n.** Colombia p. 11, PIC Mél. exot. ent. **42.**

Sycophantes subregularis, latus **spp. n.** Brazil p. 13, PIC t.c.

Sycophantomorphus **gen. n.** near *Sycophantes* Kirsch, *ater* **sp. n.** S. America p. 13, PIC t.c.

Tenebrio molitor, breeding experiments with varieties pp. 152–193, 242–269 fig., ARENDSEN HEIN Ent. Mitt. **13** ; prothetely p. 139 figs., PRUTHI Proc. Cambridge Phil. Soc. Biol. Sci. **1.**—*T. obscurus* **subsp. n.** *pollens* New Mexico p. 321, CASEY Mem. Col. **11.**—*T.* (*Neatus*) *picipes,* biology pp. 178–182, SCHOLZ Ent. Bl. **20.**

Tentyria cyrenaica **var. n.** *subpunctata* Cyrenaica p. 15, SCHUSTER Mem. Soc. ent. ital. **1** 1922.

Trimytis trapezifera **sp. n.** Calif. p. 299, CASEY Mem. Col. **11.**

Triorophus laticeps p. 297, *nevadensis, puberulus, thoracicus* p. 298, **spp. n.** U.S.A., CASEY t.c.

Zopherodes circumductus p. 304, *woodgatei, prominens* p. 305, **spp. n.** U.S.A., CASEY t.c.

CISTELIDAE (ALLECULIDAE).

Allecula baeri p. 4, *spiniventris* p. 5, *spinosa, simplex, unispinosa, subsinuata, amazonica* p. 6, *sparsepunctata, helopsioides, gounellei* p. 7, *reitteri, laeta* p. 8 S. America, *alluaudi, calathoides, ambovombeensis* p. 5 Madagascar, *striatipennis* p. 7 China, **spp. n.,** PIC Mél. exot. ent. **42.**—*A. babaulti* **sp. n.** B. E. Afr. p. 19, PIC Voy. Babault Afr. or. angl. **1921.**

Cacoplesia suturalis **sp. n.** Madagascar p. 8, PIC Mél. exot. ent. **42.**

Cistelomorpha atricollis **sp. n.** Philippines p. 230, PIC Bull. Soc. ent. Fr. **1924.**—*C. savioi* Shanghai p. 31, *brunneolineata, brevehirsuta* Manila, *rubrithorax* Borneo p. 32, **spp. n.,** PIC Mél. exot. ent. **41.**

Ectenostoma favareli p. 30, *bicoloripes* p. 31, **spp. n.** Africa, PIC t.c.

Eubalia pulchra, rufithorax, ruficeps **spp. n.** Madagascar p. 31, PIC t.c.—*E. scutellaris* **sp. n.** Madagascar p. 8, PIC op. cit. **24.**

Lobopoda rufipennis, castaneipennis, aenea p. 2, *instriata, rufimembris, dentatipes, claveri* p. 3, *latithorax, drakei, lineata, rugiceps, bicoloripes* p. 4, *foveolata* p. 32, **spp. n.** S. America, PIC op. cit. **41.**

Lystronychus semicyaneus **sp. n.** Brazil p. 9, PIC op. cit. **42.**

Microstenogena **gen. n.** (near *Stenogena*) *ruficornis* **sp. n.** Madagascar p. 30, PIC op. cit. **41.**

Nesotaurus atricornis **sp. n.** Madagascar p. 31, PIC op. cit. **41.**

Pseudocistela rufimembris **sp. n.** Madagascar p. 30, PIC op. cit. **41.**

Stenogena cyaneicollis **sp. n.** Madagascar p. 30, PIC op. cit. **41.**

Synallecula babaulti, tanaensis **spp. n.** B. E. Afr. p. 18, PIC Voy. Babault Afr. or. angl. **1921.**

Xystropus granulosus, augustalisi **spp. n.** Brazil p. 9, PIC Mél. exot. ent. **42.**

LAGRIIDAE.

Borchmannia reducta **sp. n.** (with **var. n.** *lineata*) Philippines p. 231, PIC Bull. Soc. ent. Fr. **1924.**

Nemostira ruficeps, luzonica, brunneopunctata **spp. n.** Philippines p. 231, PIC t.c.—*N. microceps, carnoti* **spp. n.** Madagascar p. 21, PIC Mél. exot. ent. **41.**

Pseudothryoneus bernardi **sp. n.** Colombia p. 12, PIC op. cit. **42.**

ANTHICIDAE.

Anthicus impressicollis **sp. n.** Morocco p. 104, CHOBAUT Bull. Soc. Sci. nat. Maroc **4.**—*A. 4-guttatus* **ab. n.** *ruiderensis* Spain p. 204, FUENTE Bol. Soc. esp. H. n. **24.**—*A. mimodromius* **var. n.** *latetestaceus* p. 27; *inaequaliceps* **subsp. n.** *subcurtus* p. 29; *crinitus* **var. n.** *reductesignatus* p. 30; *simplicicornis* p. 28, *brevissimus, nigrofasciatus* p. 29, *tanaensis* p. 30, *babaulti* (with **var. n.** *atripes*) p. 31 **spp. n.** B. E. Afr., PIC Voy. Babault Afr. or. angl. **1921.**

Formicomus atripennis p. 24, *excavatipes, tanaensis* p. 25, *babaulti* p. 26, **spp. n.** B. E. Afr., PIC t.c.

Leptaleus klugi **subsp. n.** *latefasciatus* B. E. Afr. p. 27, PIC t.c.

Notoxus jeanneli **varr. n.** *bisbinotatus, uninotatus, innotatus* B. E. Afr. p. 23, PIC t.c.

Pseudonotoxus babaulti **sp. n.** B. E. Afr. p. 23, PIC t.c.

PYROCHROIDAE.

Falsopedilus **gen. n.** (near *Pedilus*) *modestus* **sp. n.** S. Africa, p. 22, PIC Mél. exot. ent. **41.**

HYLOPHILIDAE (XYLOPHILIDAE.)

Hylobaenus quadripustulatus **sp. n.** Philippine Is. p. 482, CHAMPION Ann. Mag. N. H. (9) **13.**

Hylophilus kempi **sp. n.** Assam p. 121, BLAIR Rec. Ind. Mus. **26.**—*H. paulonotatus* **sp. n.** Philippines p. 230, PIC Bull. Soc. ent. Fr. **1924.**—*H.* (*Xylophilus*) *sexdentatus* p. 482, *patucki* p. 483, *luteitarsis* p. 484, *seminiger, trapeziderus* p. 485, *haldwaniae, breviscopa* p. 486, *tetrastictus, melanostictus* p. 487, *kumaonae* p. 488, *latidens, basifasciatus* p. 489, *subrufus, bifossulatus* p. 490 India, *luzonensis* Philippines p. 491, *labasae, rufiventris* p. 492, *fijianus* Fiji Is., *flexipes* p. 493, *thomasseti, accrensis* p. 495, *capensis* p. 496, *scraptioides, pumilio* p. 497, **spp. n.** S. & W. Africa, CHAMPION Ann. Mag. N. H. (9) **13.**

SCRAPTIIDAE.

Scraptia forticornis Balkans p. 181, *caucasicola* Caucasus p. 182, **spp. n.**, ROUBAL Wiener ent. Ztg. **41.**

MORDELLIDAE.

Anaspis (s. str.) *norvegica* **sp. n.** Norway p. 293 fig., MUNSTER Norsk ent. Tidsskr. **1.**

Glipa impressipennis p. 30 Batoe Islands, *subsinuata* p. 31 Banka **spp. n.**, PIC Tijd. Ent. **67.**

Mordella subauratonotata, pauli, maroniensis, gounellei S. America, *savioi* Shanghai **spp. n.** p. 23, PIC Mél. exot. ent. **41.**

Mordellistena nigrobimaculata p. 23, *subdiscoidalis, subunifasciata, exclamationis* p. 24, **spp. n.** Brazil, PIC op. cit. **42.**

Stenalia testacea **abb. n.** *meridionalis, sectitarsis,* **var. n.** *tristrigosa,* p. 181, *brunneipennis* **var. n.** *unistrigosa* (no locality) p. 182, *stipae, sefrensis* (with **var. n.** *peyerimhoffi*) **spp. n.** Algeria fig., CHOBAUT Bull. Soc. ent. Fr. **1924.**

Tomoxia latenotata, innotata, albosuturalis **spp. n.** Brazil p. 23, PIC Mél. exot. ent. **42.**

RHIPIPHORIDAE.

Metoecus key p. 237, *satanas* **sp. n.** Tibet p. 238, *paradoxus* **varr. n.** *obscuripennis, basalis, humeralis* p. 242, *decipiens* p. 244 Europe, SCHILDER D.

ent. Zs. **1924**.—*M. paradoxus*, notes on, Austria p. 17, SPILLER-SPLICHAL Ent. Anz. **4** 1924.

Micropelecotoides collaris, capitalis, atrospinus, rufiventris **spp. n.**, *corporaali* **var. n.** *obscurithorax, sumatrensis* **var. n.** *atriventris* Dutch E. Indies p. 19, PIC Echange **39**.

Pelecotomoides major New Guinea, *borneensis* Borneo p. 19, *boliviensis, armitagei, impressipennis* (with **varr. n.** *semirufa & ruficolor*), *bogotensis, angustior, bahiensis, donckieri, brevesculata,* **spp. n.**, *luteopubens* **var. n.** *albosparsa, argentina* **varr. n.** *uniformis, wagneri* S. Amer. p. 20, PIC Echange **39**.—*P. longesulcatus* **sp. n.**, *nigrolateralis* **var. n.** *fulvonotata*; *succincta* **varr. n.** *albomaculata, griseonotata, ruficollis, innotata*, S. America p. 22, PIC Mél. exot. ent. **41**.

Rhipiphorus tuberculaticeps **sp. n.** Tonkin p. 21, PIC t.c.

MELOIDAE.

The Meloidae of New Jersey, with key to species, MUTCHLER & WEISS N. J. State Dept. Agric. Circ. **76** 19 pp. figs.

Triungulin larvae from the Williams Galapagos Expedition, BRUES Zoologica **5** pp. 125–136 figs.

Cerocoma vahli biology, early stages pp. 262–292, CROS Bull. Soc. H. n. Afr. N. **15**.

Ceroctis interna **var. n.** *hemptinnensis, congoana* **varr. n.** *maynei, itokana, rodhaini, luluana, callewaerti* p. 447 Belgian Congo, PIC Rev. zool. afr. **12**.

Cissites, revision of African and Oriental pp. 48–71, *maxillosa* larva described p. 63 fig., CROS Bull. Soc. R. ent. Egypte **1924**.

Coryna babaulti p. 13, varr. *extenselutea, ameliana* fully described, p. 14 Portuguese E. Afr. fig., PIC Voy. Babault. Afr. or. angl. **1917**.—*C. bicoloricornis* **sp. n.**, *apicicornis* **var. n.** *rufohumeralis* p. 455 Belgian Congo, *dorsalis* **var. n.** *elgonensis, bayeri* **sp. n.** p. 446 Kenya, PIC Rev. zool. afr. **12**.

Cyaneolytta signifrons Fhs. (= *C. caelestina* Haag.) p. 3, PIC Voy. Babault Afr. or. angl. **1917**.—*C. basicollis* **sp. n.** Belgian Congo p. 452, PIC Rev. zool. afr. **12**.

Decatoma affinis **varr. n.** *plasi, mediodelata, bisexnotata* **varr. n.** *elisabethae* p. 444, *curtipennis, tshinsendanna* p. 445 Congo, PIC t.c.

Eletica rufa **var. n.** *burgeoni, maculatipes* **sp. n.**; *rubrofasciata* **varr. n.** *infasciata* p. 450, *tinanti*; *colorata* **varr. n.** *unimaculata, reducta, elongata*; *rugiceps* **var. n.** *stappersi* p. 451, *tibialis* **sp. n.** p. 452 Belgian Congo, PIC t.c.

Epicauta lindiana **var. n.** *paolii* Belgian Congo p. 452, PIC Rev. zool. afr. **12**.—*E. bifoveiceps* **var. n.** *babaulti* B. E. Afr. p. 5 fig., PIC Voy. Babault Afr. or. angl. **1917**.—*E. cinctipennis* **var. n.** *major* Guatemala, *limbaticollis* **sp. n.** Peru p. 2, PIC Mél. exot. ent. **41**.

Horia, revision of African and Oriental, larvae described pp. 27–48, CROS Bull. Soc. R. ent. Egypte **1924**.—*H. debyi* in burrows of *Xylocopa aestuans* India p. 149, BLAIR Trans. Ent. Soc. **1924**.

Lytta impressithorax **sp. n.** Shanghai p. 21, PIC Mél. exot. ent. **41**.

Mylabris brunnipes **ab. n.** *hyacinthi* Tunis p. 259 fig., CHOBAUT Bull. Soc. ent. Fr. **1923**.—*M. 5-maculata* **sp. n.** Quelpart Island p. 184 fig., OKAMOTO Bull. Agric. Expt. Sta. Govt. Gen. Chosen **1**.—*M.* (*Zonabris*) *severini* **var. n.** *multidisjuncta* p. 447, *kigomanensis, bicoloripes* p. 448, *luteoapicalis* **spp. n.**, *escherichi* **var. n.** *degreefi, bisemptemmaculata* **var. n.** *bisexmaculata* p. 449, *andrei* **var. n.** *bokorana* p. 450, Belgian Congo, PIC Rev. zool. afr. **12**.—*M.* (*Z.*) *calida* **var. n.** *interrupta* Caucasus p. 66, EICHLER Polsk. Pismo ent. **3**.

Nemognatha limbata **sp. n.**, *peringueyi* **var. n.** *cyaneiventris* p. 453, Belgian Congo, PIC Rev. zool. afr. **12**.

Sitarobrachys, systematic and biological studies p. 22, *buigasi*, eggs, larval forms &c., p. 27 fig., CROS Bull. Soc. Sci. nat. Maroc **4**.

(?) *Synhoria fischeri* larva described p. 71 fig., CROS Bull. Soc. R. ent. Egypte **1924**.

Tricania sanguinipennis biology pp. 1–40 fig., PARKER & BÖVING Proc. U. S. Nat. Mus. **64** art. 23.

Zonabris see *Mylabris*.

Zonitoschema rubricolor **sp. n.** Belgian Congo p. 454, PIC Rev. zool. afr. **12**.

OEDEMERIDAE.

Diplectrus brasiliensis, major, apollinairei **spp. n.** S. America p. 16, PIC Mél. exot. ent. **42.**

Mimoselenopalpus **gen. n.** *bicoloriceps* **sp. n.** New Guinea p. 22, PIC t.c.

Nacerda particularis **sp. n.** Colombia p. 17, PIC t.c.

Oxacis pauli, latevittata, bilineaticollis, semicincta, quinquenotata, donckieri p. 19, *atricolor, annulipes, baeri, atra, curtelineata, lojaensis* S. America, *durangosa* Mexico p. 20 **spp. n.**, PIC Mél. exot. ent. **42.**

Sessinia humboldti p. 17, *dohertyi* p. 18 New Guinea, *nodicollis* Solomon Is., *ribbei* New Britain, *jobiensis* Jobi I., *subopaca* Engano p. 17, *subapicalis* Sula Mongoli, *brunnescens* Mafor, *flavida* New Britain, *arouensis* Aru Is., *martini* Moluccas, *pallidicolor* Society Is., *impressithorax* Marshall Is. p. 18 **spp. n.**, PIC t.c.

Sisenes baeri **sp. n.** Peru p. 16, PIC t.c.

PYTHIDAE.

Chilopeltis tonkineus **sp. n.** Tonkin p. 68, PIC Bull. Soc. ent. Fr. **1924.**

Platysalpingus, key to genera allied to, p. 68, PIC t.c.

Sphaeriestes nigrocyaneus **sp. n.** India p. 264, CHAMPION Ann. Mag. N. H. (9) **13.**

MELANDRYIDAE.

Mecorchesia brevicornis larva described p. 342 fig., HUDSON Trans. N. Z. Inst. **55.**

Mycterus maculosus p. 171, *nodicornis* p. 172 **spp. n.** India fig., CHAMPION Ent. Mo. Mag. **60.**

Tetratoma cyanoptera **sp. n.** Sikkim p. 263, CHAMPION Ann. Mag. N. H. (9) **13.**

MONOMMIDAE.

Monomma babaulti **sp. n.** (with **var. n.** *ruficolor*) B. E. Afr. p. 16, PIC Voy. Babault Afr. or. angl. **1921.**—*M. multipunctatum, elevatum, immaculatum* Madagascar, *natalense* Natal **spp. n.**, *auratum* **var. n.** *perroti* Madagascar p. 1, *foveolatum* **sp. n.** Madagascar p. 3, PIC Mél. exot. ent. **41.**

CURCULIONIDAE.

Contribution toward the classification of the weevil larvae of the subfamily Calendrinae occurring in N. America, COTTON Proc. U. S. Nat. Mus. **66** art. 5 pp. 1–11 figs.

Synonymic list of the Palaearctic Ceuthorrhynchidae of A. Schultze, v. DALLA TORRE Ent. Jahrb. **31** 1922 pp. 124–135.

Biological and other notes on Rhynchophora, DEVILLE Faune Col. Bas. Seine **6** (bis) Sup. Rhynch 1924 pp. 1–159.

Curculionidae gallo-rhénans, with keys, HUSTACHE Ann. Soc. ent. Fr. **93** pp. 31–124 figs.

Curculionidae de la faune franco-rhénane, I. Ceuthorrhynchini, HUSTACHE Misc. ent. **27** & **28** pp. 143–238 sep. pag. (cont'd.).

Larval mines of Orchestini, KLEINE Zs. wiss. Insektenbiol. **19** pp. 203–207 (fig.) 251–254.

Biology of German Rhynchitinae, PRELL Zool. Anz. **61** p. 153 figs.

The Italian Apioninae, SCHATZMAYR Mem. Soc. ent. ital. **1** 1922 pp. 158–225.

Acalyptops coerulescens **sp. n.** Belgian Congo p. 64, HUSTACHE Rev. zool. afr. **12.**

Achirozetes **gen. n.** (near *Chirozetes*) for (*C.*) *validipes* H. and *kleinei* **sp. n.** Philippines p. 288 fig., HELLER Phil. J. Sci. **25.**

Acicnemis hubenthäli p. 148, *sagittata* p. 149, *tuberculata* p. 150, *crenulata* p. 151, *intermedia, setosa* p. 152, *costata* p. 153, *armata, marmorata* p. 154, *pulchella, glabra* p. 155, *bifida* p. 156, *biformata, blanda* p. 157, *caliginosa, callosa* p. 158, *calva, candida* p. 159, *fragosa* p. 160, *canora* p. 161, *cruciata, philippinensis* p. 162, *crassa* p. 163 Malay Archipelago, *testacea* New Britain p. 156, *fossilis*† Celebes copal p. 161 **spp. n.**, KLEINE Arch. Natg. **90** Abt. A Heft 4.

Alcides mayněi p. 70, *sagonai, niger* p. 71, *depressipennis* p. 72, *trifasciculatus* p. 73 **spp. n.** Belgian Congo, HUSTACHE Rev. zool. afr. **12.**

Amaurorrhinus crassicornis **sp. n.** W. Sahara p. 76 fig., PEYERIMHOFF Bull. Soc. ent. Fr. **1924.**

Anathymus nigroscutellatus **sp. n.** Philippines p. 297 fig., HELLER Phil. J. Sci. **25.**

Anchithyrus caliginosus, reticulatus **spp. n.** Queensland p. 88, LEA Trans. R. Soc. S. Aust. **36** 1912.

Anilaus costirostris **sp. n.** Queensland p. 103, LEA Trans. R. Soc. S. Aust. **36** 1912.

Anthoromus spp. synonymy and other notes p. 74, CHAMPION Ent. Mo. Mag. **60.**

Apion, Ixias **subgen. n.** type *variegatum* Wenck. p. 122, *Thymapion* **subgen. n.** p. 135, DEVILLE Faune Col. Bas. Seine **6** (bis) Sup. Rhynch. 1924.—*A. csikii* p. 25, *wagnerianum* p. 26 S. India, *dudichi* p. 27 Tyrol **spp. n.**, *hustachei* **n.n.** for *Piezotrachelus androicum* p. 28, GYÖRFFY Folia ent. hung. **1.**—*A.* (*Erythrapion*), descriptive notes p. 106 and key p. 112 to Italian species of subgenus, SCHATZMAYR Redia **15.**—*A.*, notes and key to Italian spp. of subg. *Catapion* pp. 24–59, SCHATZMAYR Mem. Soc. ent. ital. **1** 1922.—*A.* (*Catapion*) *calabricum* **sp.n.** Italy p. 28, A. & F. SOLARI in SCHATZMAYR Mem. Soc. ent. ital. **1** 1922.—†*A.* (*Electrapion* **subgen. n.**) *kuntzeni* **sp. n.** Baltic amber, *Cistapion* **subgen. n.** for *A. cyanescens* Gyll. p. 134, WAGNER D. ent. Zs. **1924.**

Apocyrtus mcgregori **sp. n.** Philippines p. 375 figs., SCHULTZE Phil. J. Sci. **25.**

Apoderus centralis **sp. n.** B. E. Afr. p. 69, HUSTACHE Voy. Babault Afr. or. angl. **1921.**—*A. brachialis* p. 282, *sejugatus* p. 283, **spp. n.** Formosa, VOSS D. ent. Zs. **1924.**

Apodrusus argentatus **sp. n.** Porto Rico p. 130, WOLCOTT J. Dept. Agric. P. R. **7.**

Artapocyrtus rufipes **sp. n.** Philippines p. 172, HELLER Wiener ent. Ztg. **41.**

Attelabus melanocoryphus, biology pp. 21–25 fig., PINHEIRO MACHADO Bol. Soc. ent. Brazil **1923.**—*A. elongaticeps* **sp. n.** Formosa p. 279, VOSS D. ent. Zs. **1924.**—*A. coccolobae* **sp. n.** Porto Rico p. 123, WOLCOTT J. Dept. Agric. P. R. **7.**—*A. cygneus* F., *moluccarum* Fst. *collaris* Jek., see *Paracycnotrachelus.*

Austrectopsis **gen. n.** p. 130, *oblongus* **sp. n.** p. 131 Queensland, LEA Trans. R. Soc. S. Aust. **36** 1912.

Babaultia **gen. n.** p. 25, *ebenina* p. 26, *minor* p. 28, **spp. n.** B. E. Afr. (fig.), HUSTACHE Voy. Babault Afr. or. angl. **1921.**

Bagous micaceus p. 63, *bequaerti* p. 64, **spp. n.** Belgian Congo, HUSTACHE Rev. zool. afr. **12.**

Baris argenteopicta p. 56, *babaulti* p. 57, **spp. n.** B. E. Afr. figs., HUSTACHE Voy. Babault Afr. or. angl. **1921.**—*B. subulata* p. 381, *kapirensis* p. 382, *rubripes, tinantae* p. 383, *uelensis* p. 384, *maynei, miniata* p. 385, *circumscutellata* p. 386, *schoutedeni, lembaensis* p. 387, **spp. n.** Belgian Congo, HUSTACHE Rev. zool. afr. **12.**

Brachyporopterus vermiculatus **sp. n.** N.S.W. p. 110, LEA Trans. R. Soc. S. Aust. **36** 1912.

Brachyscapus costipennis **sp n.** Belgian Congo p. 395, HUSTACHE Rev. zool. afr. **12.**

Brachysomus moczarskii **sp. n.** Thessaly p. 14, PENECKE Wiener ent. Ztg. **41.**

Cairnsicis **gen. n.** p. 133, *opalescens* **sp. n.** p. 134 Queensland, LEA Trans. R. Soc. S. Aust. **36** 1912.

Calandra (*Sitophilus*) *rugicollis* Casey (= *shoreae,* Mshl.) p. 141, COTTON Proc. Ent. Soc. Wash. **26.**

Calodiasthetus **subgen. n.** see *Diasthetus.*

Calophylaitis **gen. n.** (near *Phylaitis*) *principalis* **sp. n.** Philippines p. 292, HELLER Phil. J. Sci. **25.**

Camptorrhinus brunneolateralis p. 87, *variabilis* p. 88, *griseus* p. 353 **spp. n.** French & Belgian Congo, HUSTACHE Rev. zool. afr. **12.**

Cathormiocerus key p. 81, *avenionensis* **sp. n.** Vaucluse, p. 87, HUSTACHE Ann. Soc. ent. Fr. **93.**

Cedilaus **gen. n.** p. 83, *ambiguus* **sp. n.** N.S.W. p. 84, LEA Trans. R. Soc. S. Aust. **36** 1912.

Ceratocrates tuberculosus **sp. n.** B. E. Afr. p. 13 fig., HUSTACHE Voy. Babault Afr. or. angl. **1921.**

Cercidocerus sanguinipes **sp. n.** Philippines p. 303, HELLER Phil. J. Sci. **25.**

Ceuthorrhynchus, food-plants pp. 59–60, HEYMES Ent. Bl. **20.**—*C. ruebsameni,* biology, distribution pp. 298–

302, KOLBE Ent. Mitt. **13.**—*C. scrobicollis* **sp. n.** Germany p. 159 fig., NERESHEIMER & WAGNER D. ent. Zs. **1924.**—*C.* (*Dionorenus*) *perasper* **sp. n.** N. Africa p. 64, DE PEYERHIMOFF Bull. Soc. ent. Fr. **1924.**—*C.*, biology and development pp. 50–55 & 81–86, URBAN Ent. Bl. **20.**

Chirozetes lineolatus **sp. n.** Philippines p. 288 fig., HELLER Phil. J. Sci. **25.**—*C. validipes* Heller see *Achirozetes.*—*C. subminiatipes* **sp. n.** Philippines p. 176, HELLER Wiener ent. Ztg. **41.**

Cimbus ovalis **sp. n.** B. E. Afr. p. 10 fig., HUSTACHE Voy. Babault Afr. or. angl. **1921.**

Cionus woodi Don. a var. of *scrophulariae* p. 34, CHAMPION Ent. Mo. Mag. **60.**—*C. simplex* **ab. n.** *anticemaculatus* Europe p. 231, PLAVILSTSHIKOV Ann. Mag. N. H. (9) **13.**

†*Cistapion* **subgen. n.** see *Apion.*

Coeliodes maynéi **sp. n.** p. 380 (with **varr. n.** *aeneus, concolor, setulosus* p. 381) Belgian Congo, HUSTACHE Rev. zool. afr. **12.**

Compsus maricao **sp. n.** Porto Rico p. 125, WOLCOTT J. Dept. Agric. P. R. **7.**

Conotrachelus seniculus, elegans biology p. 119, CHITTENDEN J. N. Y. Ent. Soc. **32.**—*C. anaglypticus* early stages pp. 380–384 fig., COTTON J. Agric. Res. **28.**

Corynemerus nitidulus **var. n.** *rufipes* Belgian Congo p. 393, HUSTACHE Rev. zool. afr. **12.**

Coryssopus flavolineatus p. 366, *schoutedeni, carinicollis* p. 367, *minutus* p. 368 Belgian Congo **spp. n.**, HUSTACHE t.c.

Cossonus burgeoni p. 394, *maynéi* p. 395, **spp n.** Belgian Congo, HUSTACHE t.c.

Cryptoderma longicolle, mangyanum, Philippines **spp. n.** p. 306 fig., HELLER Phil. J. Sci. **25.**

Cryptorrhynchus africanus **sp. n.** Belgian Congo p. 357, HUSTACHE Rev. zool. afr. **12.**

Cycnotrachelus camphoricola **sp. n.** China p. 45, VOSS Ent. Bl. **20.**—*C. formosanus* **sp. n.** Formosa p. 281, VOSS D. ent. Zs. **1924.**

Cylas formicarius, biology pp. 398–435 fig., KEMNER Zs. angew. Ent. **10.**

Cyllophorus vicinus p. 369, *robustirostris* p. 370, *crassirostris* p. 371, *obscurus* p. 372, *lujai, centrinoidus* p. 373, *ovatus, griseomaculatus, novemmaculatus* p. 374, *angustus, africanus* p. 375, **spp. n.** Belgian Congo, HUSTACHE Rev. zool. Afr. **12.**—*C. albomaculatus* **sp. n.** B. E. Afr. p. 71, HUSTACHE Voy. Babault Afr. or. angl. **1921.**

Cyrtepistomus pini p. 285, *glebosus,* p. 287, **spp. n.** India, MARSHALL Ann. Mag. N. H. (9) **13.**

Calodiasthetus **subgen. n.** see *Diasthetus.*

Deiradognathoidus **gen. n.** p. 51, *cariniferus* **sp. n.** B. E. Afr. p. 52 fig., HUSTACHE Voy. Babault Afr. or. angl. **1921.**

Deporaus fuliginosus Annam p. 36, *diversus, corporaali* p. 37, *pallidiventris* p. 38 Sumatra, *indicus, flaviventris* India p. 39 **spp. n.**, VOSS Ent. Bl. **20.**

Derelomus ciliatus p. 74, *bilineatus, maynéi* p. 76, *callosus* p. 76, *congoanus,* p. 77 **spp. n.** Belgian Congo, HUSTACHE Rev. zool. afr. **12.**

Dereodus elegantulus **sp. n.** Belgian Congo p. 53, HUSTACHE t.c.

Desmidophorus hubenthali **sp. n.** Philippines p. 174, HELLER Wiener ent. Ztg. **41.**

Diasthetus (*Calodiasthetus* **subgen. n.**) *marshalli* **sp. n.** Philippines p. 179 fig., HELLER Wiener ent. Ztg. **41.**—*D. crassiusculus* **sp. n.** Philippines p. 301 figs., HELLER Phil. J. Sci. **25.**

Dichotrachelus ravasinii **sp. n.** Italy p. 79, MÜLLER Boll. Soc. ent. ital. **56.**

Dyscerus longiclavis p. 291, *furcatus* p. 292, **spp. n.** India, MARSHALL Ann. Mag. N. H. (9) **13.**

Ecildaus **gen. n.** p. 123, *personatus* p. 124, *melancholicus, glabricornis* p. 125, **spp. n.** Australia, LEA Trans. R. Soc. S. Aust. **36** 1912.

†*Electrapion* **subgen. n.** see *Apion.*

Endaeopsis callosus **sp. n.** Belgian Congo p. 65, HUSTACHE Rev. zool. afr. **12.**

Entypotrachelus micans **sp. n.** B. E. A. p. 61, HUSTACHE Voy. Babault Afr. or. angl. **1921.**

Eremotes congoanus **sp. n.** Belgian Congo p. 396, HUSTACHE Rev. zool. afr. **12.**

Eufaustia **gen. n.** p. 117, *mirabilis* **sp. n.** N. S. W. p. 118, LEA Trans. R. Soc. S. Aust. **36** 1912.

Eugnamptus hirsutus Sumatra p. 34, *affinis* Annam p. 35, *viridirostris* India p. 36, **spp. n.**, Voss Ent. Bl. **20.**

Euops, key p. 39, *affinis* Victoria & Queensland p. 46, *bürgersi* p. 47, *femoralis* p. 50, *armatipennis* p. 51, *singularis* p. 57 German New Guinea, *maculata* Mysol p. 48, *borneoensis* Borneo p. 49, *montana* Australia (Tam Mts.), *monticola* (with **f. n.** *hildebrandti*) E. Africa p. 53, *minuta*, *distincta* Madagascar p. 54, (*Synechops* **subgen. n.** p. 44) *anceps* Borneo, *scutellaris* Sumatra p. 58, *subopaca* Celebes p. 59, *semicuprea*, *palawana* p. 60, *dentata* p. 61, *boviei* Philippines, *viridicollis* India p. 64 **spp. n.**, *eucalypti* **f. n.** *castaneipennis* Australia p. 46, *splendens* **ff. n.** *unicolorata* Japan, *koreana* Korea, *nietneri* **f. n.** *metallica* Ceylon p. 56, *indigena* p. 278, *chinensis*, *striata* p. 279, **spp. n.** Formosa, Voss D. ent. Zs. **1924.**

Eupachyrrhynchus hieroglyphicus Schultze see *Macrocyrtus* (*Exmacrocyrtus*).

Euryporopterus tenuifasciatus **sp. n.** N. S. W. p. 111, LEA Trans. R. Soc. S. Aust. **36** 1912.

Exithioides **gen. n.** *punctatus* **sp. n.** N. S. W. p. 116, LEA t.c.

Exithius ferrugineus p. 112, *conspiciendus* Tasmania, *loculosus* p. 113, *sculptilis* p. 114, *inamabilis*, *brevis* p. 115, **spp. n.** N.S.W., LEA t.c.

Exmacrocyrtus **subgen. n.** see *Macrocyrtus*.

Exnothapocyrtus **gen. n.** for *Nothapocyrtus cylindricollis* Heller, *alboplagiatus* Heller, *erythromerus* Heller, *luzonicus* Schultze, *bifasciatus* Heller p. 384, SCHULTZE Phil. J. Sci. **25.**

Glyptoporopterus **gen. n.** p. 90, *asper* **sp. n.** p. 91 N.S.W., LEA Trans. R. Soc. S. Aust. **36** 1912.

Gymnoporopterus **gen. n.** p. 136, *pictipes* **sp. n.** Queensland p. 137, LEA t.c.

Haplocorynus pumilius **sp. n.** p. 81 (with **var. n.** *obscurus* p. 82), *maculatus*, *lujai* p. 83, *carinicollis* p. 85, *postfasciatus* p. 86, **spp. n.** Belgian Congo, HUSTACHE Rev. zool. afr. **12.**

Haptomerus aeneus **sp. n.** B. E. Afr. p. 42 fig., HUSTACHE Voy. Babault Afr. or. angl. **1921.**

Hoplapoderus pardaloides **sp. n.**, *vitticeps* **f. n.** *tristoides* Formosa p. 284, Voss D. ent. Zs. **1924.**

Hoplitotrachelus nigromaculatus **sp. n.** B. E. Afr. p. 35 fig., HUSTACHE Voy. Babault Afr. or. angl. **1921.**

Hoplodecilaus **gen. n.** p. 84, *marmoratus* **sp. n.** W. Australia p. 85, LEA Trans. R. Soc. S. Aust. **36** 1912.

Hormops latipennis **sp. n.** Texas p. 336, CASEY Mem. Col. **11.**

Hydronomus curtipennis **sp. n.** Belgian Congo p. 63, HUSTACHE Rev. zool. afr. **12.**

Hylobius abietis notes p. 97, KRAUSSE Intern. ent. Zs. **18.**

Hypera or *Phytonomus* p. 216, BARBER Proc. Ent. Soc. Wash. **26.**

Illidgea **gen. n.** p. 92, *16-tuberculata* **sp. n.** Queensland p. 93, LEA Trans. R. Soc. S. Aust. **36** 1912.

Imaliodes scitulus, *ovipennis* p. 86, *frater* p. 87, **spp. n.** Australia, LEA t.c.

Iphisomus perforatus p. 59, *cinereus* p. 60, *gracilicornis* p. 61, **spp. n.** Belgian Congo, HUSTACHE Rev. zool. afr. **12.**

Isaniris lanipes **sp. n.** B. E. Afr. p. 24 fig., HUSTACHE Voy. Babault Afr. or. angl. **1921.**

Ischnotrachelus (*Astycomerus*) *curtus* **sp. n.** p. 54 (with **var. n.** *ogouensis*), *bellus*, *maynéi* p. 55, *affinis* p. 56, **spp. n.** French & Belgian Congo, HUSTACHE Rev. zool. afr. **12.**

Isopterus brevior, *tesselatus* **spp. n.** Philippines p. 170, HELLER Wiener ent. Ztg. **41.**

Ithyporus setulosus **sp. n.** Belgian Congo, p. 78, HUSTACHE Rev. zool. afr. **12.**

Ixias **subgen n.** see *Apion*.

Lacordairius antoinei p. 353, *herrerai* p. 354, **spp. n.** Morocco figs., ESCALERA Bol. R. Soc. esp. Hist. nat. **24.**

Laogenia cylindricollis **sp. n.** Philippines p. 305, HELLER Phil. J. Sci. **25.**

Larinomesius **subgen. n.** see *Larinus*.

Larinorhynchus **subgen. n.** see *Larinus.*

Larinus nodieri **sp. n.** Senegal & Belgian Congo p. 70, HUSTACHE Rev. zool. afr. **12.**—*L. saussureae* p. 288, *assamensis* p. 289, **spp. n.** India, MARSHALL Ann. Mag. N. H. (9) **13.**—*L.*, keys p. 61 (*Larinorhynchus* p. 68, *Larinomesius* p. 73 **subgg. n.**), *vittatus* **var. n.** *bilineatus* Barcelona p. 67, *fleischeri* **sp. n.** Moravia p. 74, REITTER Wiener ent. Ztg. **41.**

Lecanophora key p. 37, *setosula* p. 38, *lateralis* p. 39, *babaulti* p. 40, *margaritacea, mixta* p. 41, **spp. n.** B. E. A. fig., HUSTACHE Voy. Babault Afr. or. angl. **1921.**

Leptoscapus cylindricus **sp. n.** Belgian Congo p. 56, HUSTACHE Rev. zool. afr. **12.**

Limnobaris t-album, notes pp. 155–159, JANSSON Ent. Tidsk. **45.**

Liparus key p. 5, *integer* **sp. n.** Poland p. 4, LOMNICKI Rozpraw i Wiadomosci z Muzeum im. Dzieduszyckich **9.**

Lixus anguinus, biology pp. 137–146, SARRA Boll. Lab. Zool. Portici **17.**

Lobotrachelus nitens **sp. n.** B. E. Afr. p. 73, HUSTACHE Voy. Babault Afr. or. angl. **1921.**—*L. burgeoni, affinis* p. 363, *pygmaeus, schoutedeni* p. 364, *vicinus, variabilis* p. 365, Belgian Congo **spp. n.** HUSTACHE Rev. zool. afr. **12.**

Lujaiella **gen. n.** *viridis* **sp. n.** Belgian Congo p. 47, HUSTACHE Rev. zool. afr. **12.**

Macrocyrtus (*Exmacrocyrtus* **subgen. n.**) key p. 365, *erosus* **var. n.** *impressimaculatus* Philippines p. 367, SCHULTZE Phil. J. Sci. **25.**

Mandalotus foveatus N.S.W. p. 76, *bicarinatus* p. 77, *rufipes* p. 78, *latus* p. 79 Tasmania, *tenuicornis* Victoria p. 78, **spp. n.**, LEA Trans. R. Soc. S. Aust. **36** 1912.

Mechistocerus congoanus **sp. n.** Belgian Congo p. 355, HUSTACHE Rev. zool. afr. **12.**

Mecopus coelestis **sp. n.** Philippines p. 290, HELLER Phil. J. Sci. **25.**

Mecysmoderes humeralis p. 57, *brevicornis* p. 58, *crassirostris* p. 59, *suturalis* p. 60, *minutus* p. 61, **spp. n.** Sikkim, HUSTACHE Bull. Soc. ent. Fr. **1924.**

Menemachus deplanatus, schoutedeni p. 360, *brunneus* p. 361, **spp. n.** Belgian Congo, HUSTACHE Rev. zool. afr. **12.**

Meneudetus apicalis, crux **spp. n.** Belgian Congo p. 363, HUSTACHE t.c.

Metapocyrtus trispilotus **sp. n.** Philippines p. 173, HELLER Wiener ent. Ztg. **41.**

Metialma rufirostris **subsp. n.** *philippinica* p. 292, *straminea, laquearis,* **spp. n.** p. 293 Philippines, key to Philipp. spp. p. 294, HELLER Phil. J. Sci. **25.**—*M. albiventris* p. 375, *schoutedeni* p. 376, *pumila* p. 377, *ferruginea* p. 378, *pubescens, maynéi* p. 379, Belgian Congo, **spp. n.**, HUSTACHE Rev. zool. afr. **12.**

Microcryptorhynchus echinatus p. 137, *cylindricollis* p. 138, **spp. n.** Australia, LEA Trans. R. Soc. S. Aust. **36** 1912.

Microzetes **gen. n.** (near *Chirozetes*) *trochilus* **sp. n.** Philippines p. 289 fig., HELLER Phil. J. Sci. **25.**

Mitophorus pilosus **sp. n.** B. E. Afr. p. 16 fig., HUSTACHE Voy. Babault Afr. or. angl. **1921.**

Myllocerus massaicus p. 31, *persimilis* p. 32, **spp. n.** B. E. Afr., HUSTACHE t.c. —*M. bayeri, magnificus* p. 47, *cephalotes* p. 48 (with **var. n.** *perplexus*), *amoenus* p. 49, *impressithorax, rodhaini* p. 50, *vanderijsti* p. 51, *nemorosus* p. 52, **spp. n.** Central Africa, HUSTACHE Rev. zool. afr. **12.**

Myrtesis nasuta p. 104, *pullata* p. 105, **spp. n.** Queensland, LEA Trans. R. Soc. S. Aust. **36** 1912.

Nanophyes burgeoni p. 77, *ituriensis* p. 78 **spp. n.** Belgian Congo, HUSTACHE Rev. zool. afr. **12.**—*N. binhanus* (with **var. n.** *atrocephalus*) p. 14, *robustus* p. 15 Tonkin, *atrolineatus* (with **var. n.** *subobliteratus*) p. 14 China, **spp. n.**, PIC Mél. exot. ent. **41.**

Nauphaeus marginemaculatus p. 177, *bispilotus* p. 178, **spp. n.** Philippines, HELLER Wiener ent. Ztg. **41.**—*N. decoratus* **sp. n.** Philippines p. 294, HELLER Phil. J. Sci. **25.**

Nechyrus destitutus **sp. n.** Philippines p. 175, HELLER Wiener ent. Ztg. **41.**

Neocimbus squamulosus **sp. n.** B. E. Afr. p. 53, HUSTACHE Rev. zool. afr. **12.**

Neodecilaus **gen. n.** *picus* p. 81, *gratus* p. 82, **spp. n.** Queensland, LEA Trans. R. Soc. S. Aust. **36** 1912.

Niphades congoanus **sp. n.** French & Belgian Congo p. 68, HUSTACHE Rev. zool. afr. **12**.

Nothapocyrtus spp. see *Exnothapocyrtus*.

Notocalviceps **gen. n.** p. 126, *punctipennis* p. 127, *rarus* p. 128, **spp. n.** Australia, LEA Trans. R. Soc. S. Aust. **36** 1912.

Ocladius hirtipennis **sp. n.** Belgian Congo p. 354, HUSTACHE Rev. zool. afr. **12**.

Ommatolampus schultzei p. 296, *sulcirostris* p. 297, **spp. n.** Philippines figs., HELLER Phil. J. Sci. **25**.

Omotemnus sanguinosus **subsp. n.** *x-rufum* Philippines p. 296, HELLER t.c.

Omydaus subfasciculatus, *contractus* p. 94, *impressicollis* p. 95, *confusus* p. 96, **spp. n.** N.S.W., LEA Trans. R. Soc. S. Aust. **36** 1912.

Onidistus subfornicatus **sp. n.** Queensland p. 119, LEA Trans. R. Soc. S. Aust. **36** 1912.

Onychogymnus unicolor **sp. n.** Belgian Congo p. 67, HUSTACHE Rev. zool. afr. **12**.

Orchestes pallicornis bionomics pp. 1–37 fig. FLINT, CHANDLER & GLENN Bull. Illinois N. H. Survey **15**.

Otidognathus pictus **subsp. n.** *nigricollis* Philippines p. 295, HELLER Phil. J. Sci. **25**.

Otiorrhynchus crataegi, first larval stage p. 126 fig., HEIKERTINGER Verh. zool.-bot. Ges. Wien **73**.—*O. celejensis* **sp. n.** Styria p. 78, MÜLLER Boll. Soc. ent. ital. **56**.—*O. pelionis* **sp. n.** Thessaly p. 13, PENECKE Wiener ent. Ztg. **41**.—*O. sulcatus*, larva pp. 175–178 fig., URBAN Ent. Bl. **20**.

Ouroporopterus **gen. n.** *diurus* **sp. n.** N.S.W. p. 109, LEA Trans. R. Soc. S. Aust. **36** 1912.

Pachyrrhynchus baluganus **sp. n.** p. 322, *congestus* **subsp. n.** *ocellatus* v. 326, *taylori* **subsp. n.** *metallescens* p. 332, *benguetanus* **sp. n.** p. 333, *cumingi* **par. n.** *boholensis* p. 348, *ochroplagiatus* **var. n.** *multiplagiatus* p. 358, *erichsoni* subsp. *eschscholtzi* **var. n.** *ilocanus*, *negrosensis* **sp. n.** p. 362, Philippines fig., SCHULTZE Phil. J. Sci. **24**.—*P. eos* **sp. n.** Philippines p. 171, HELLER Wiener ent. Ztg. **41**.

Palaeocorynus boviei p. 79, *brevipennis* p. 80 **spp. n.** Belgian Congo, HUSTACHE Rev. zool. afr. **12**.

Paletonidistus **gen. n.** *trisinuatus* **sp. n.** N.S.W. p. 123, LEA Trans. R. Soc. S. Aust. **36** 1912.

Paracycnotrachelus **gen. n.** for *Apoderus cygneus* F., *moluccarum* Fst., *collaris* Jek. p. 45, VOSS Ent. Bl. **20**.

Paremydica parvula **sp. n.** Belgian Congo p. 356, HUSTACHE Rev. zool. afr. **12**.

Paratrachelophorus **gen. n.** (near *Trachelophorus*), *brachmanus* **sp. n.** India p. 44 fig., VOSS Ent. Bl. **20**.—*P. nodicornis* **sp. n.** Formosa p. 280, VOSS D. ent. Zs. **1924**.

Parisocordylus pilosellus **sp. n.** Belgian Congo p. 392, HUSTACHE Rev. zool. afr. **12**.

Peribrotus mixtus p. 15 fig., *brunneus* p. 63, **spp. n.** B. E. Afr., HUSTACHE Voy. Babault Afr. or. angl. **1921**.

Periphemus albomaculatus **sp. n.** Philippines p. 301, HELLER Phil. J. Sci. **25**.

Peritelus congoanus **sp. n.** Belgian Congo p. 44, HUSTACHE Rev. zool. afr. **12**.

Phaenomerus reclinatus **sp. n.** Assam p. 293, MARSHALL Ann. Mag. N. H. (9) **13**.

Philorectus **gen. n.** (near *Eugnamptus*), *insolitus* **sp. n.** India p. 40, VOSS Ent. Bl. **20**.

Phylaitis vidua **sp. n.** Philippines p. 291 fig., HELLER Phil. J. Sci. **25**.

Phytobius hygrophilus **sp. n.** France p. 248, HUSTACHE Bull. Soc. ent. Fr. **1923**.

Phytonomus see *Hypera*.

Piezotrachelus [subgen.] *androicum* see *Apion hustachei*.

Pissodes, key to Russian species pp. 127–129 fig., REICHARDT Défense des Plantes **1**.

Platyscapus **gen. n.** p. 28, *oblongus* **sp. n.** B. E. Afr. p. 29 fig., HUSTACHE Voy. Babault Afr. or. angl. **1921.**

Plinthus findeli **subsp. n.** *vicentinus* Italy p. 79, MÜLLER Boll. Soc. ent. ital. **56.**

Poropterculus **gen. n.** p. 99, *subnitidus* **sp. n.** W. Australia p. 100, LEA Trans. R. Soc. S. Aust. **36** 1912.

Poropterellus **gen. n.** p. 89, *intercoxalis* **sp. n.** Queensland p. 90, LEA t.c.

Poropterinus **gen. n.** *trilobus* **sp. n.** N.S.W. p. 98, LEA t.c.

Poteriophorus regulus **sp. n.** Philippines p. 302 fig., HELLER Phil. J. Sci. **25.**

Prodioctes surigaonis (with **var. n.** *nigripennis*) p. 298, *unicolor* p. 299, **spp. n.** Philippines fig., HELLER t.c.

Pseudacanthorrhinus **gen. n.** (near *Sphenocorynus*) p. 303, *bipodex* **sp. n.** Philippines p. 304 figs., HELLER t.c.

Pseudomydaus **gen. n.** *tenuis* **sp. n.** N.S.W. p. 96, LEA Trans. R. Soc. S. Aust. **36** 1912.

Pseudonidistus **gen. n.** p. 120, *cordatus* **sp. n.** Queensland p. 121, LEA t.c.

Pteroporopterus **gen. n.** p. 100, *lacunosus* **sp. n.** Queensland p. 101, LEA t.c.

Ptochus congoanus **sp. n.** Belgian Congo p. 44, HUSTACHE Rev. zool. afr. **12.**

Rhynchites bicolor **f. n.** *erythrosoma*, Colorado p. 144, COCKERELL & HARRIS Ent. News **35.**—*R. rubrithorax* **sp. n.** B. E. Afr. p. 70, HUSTACHE Voy. Babault Afr. or. angl. **1921.**—*R. bucklandiae* Sikkim p. 282, *pristis* Assam p. 283, **spp. n.,** MARSHALL Ann. Mag. N. H. (9) **13.**—*R. interpunctatus, pauxillus, coeruleocephalus,* biology pp. 187–190 fig., SCHMIDT Zs. wiss. Insektenbiol. **19.**—*R. tonkinensis* China p. 41, *bicuspis* Sumatra, *malabarensis* India p. 42, *simulans* [*sine loco*] p. 43 **spp. n.,** VOSS Ent. Bl. **20.**

Rhyncogonus saltus **sp. n.** Hawaii p. 379, PERKINS Proc. Hawaiian Ent. Soc. **5.**

Roptoperus terraereginae p. 132, *occidentalis* p. 133, **spp. n.** Australia, LEA Trans. R. Soc. S. Aust. **36** 1912.

Sibinia hispanica **sp. n.** Spain p. 246, HUSTACHE Bull. Soc. ent. Fr. **1923.**

Siderodactylus humeridens p. 57, *amplicollis, obscurus* p. 58, **spp. n.** Belgian Congo, HUSTACHE Rev. zool. afr. **12.**

Sipalus brevis **sp. n.** Belgian Congo p. 392, HUSTACHE Rev. zool. afr. **12.**

Sitophilus see *Calandra.*

Sphadasmus maculatus p. 54 fig., *brunneus* p. 72, **spp. n.** B. E. Afr., HUSTACHE Voy. Babault Afr. or. angl. **1921.**

Sphenocorynus femoratus **sp. n.** Philippines p. 299, HELLER Phil. J. Sci. **25.**

Sphenophorus pontederiae habits p. 311, BLAKE Psyche **31.**—*S. schwarzi* **sp. n.** p. 145, *aequalis* **varr. n.** *vittata* p. 146, *scirpi* p. 147, *ochreus* **var. n.** *atrivittata* p. 147, *peninsularis* **var. n.** *nasutus, setiger* **var. n.** *intervallatus, robustus* **var. n.** *rectistriatus* p. 148; *blatchleyi, serratipes* p. 149, *jugosus* (no locality) **spp. n.,** *incongruus* **var. n.** *elephantulus* p. 151, *robustior* **var. n.** *costifer* p. 152, *holosericus* p. 153, *reticulatus, bartramiae* p. 154, **spp. n.** *germari* **var. n.** *pinguis, compressirostris* **var. n.** *obscuripennis,* p. 158 U.S.A. figs., CHITTENDEN Proc. Ent. Soc. Wash. **26.**—*S. nigrovittatus* **sp. n.** Philippines p. 304 fig., HELLER Phil. J. Sci. **25.**

Strophosomus stappersi **sp. n.** Belgian Congo p. 44, HUSTACHE Rev. zool. afr. **12.**

Stereoderus dispar **sp. n.** Assam p. 295, MARSHALL Ann. Mag. N. H. (9) **13.**

Sympiezorrhynchus bidentatus **sp. n.** Belgian Congo p. 62, HUSTACHE Rev. zool. afr. **12.**

Synechops **subgen. n.** see *Euops.*

Systates ptochoides **sp. n.** Belgian Congo p. 45, HUSTACHE Rev. zool. afr. **12.**—*S. castaneipennis* p. 18, *minutus* p. 20, *affinis* p. 21, *nitens* p. 22, *elongatus* p. 64, *sulcatus* p. 66, **spp. n.** B. E. Afr. figs., HUSTACHE Voy. Babault Afr. or. angl. **1921.**

Tanarus **gen. n.** p. 46, *difficilis* **sp. n.** B. E. Afr. p. 47 fig., HUSTACHE t.c.

Tanymecus orientalis p. 11, *mixtus* p. 12, **spp. n.** B. E. Afr., HUSTACHE t.c.—*T. bayeri* **sp. n.** B. E. Afr. p. 52, HUSTACHE Rev. zool. afr. **12.**

Telephae burgeoni **sp. n.** Belgian Congo p. 359, HUSTACHE Rev. zool. afr. **12.**

Temnoschoita maynéi **sp. n.** Belgian Congo p. 393, HUSTACHE t.c.

Tentegia quadriseriata, tortipes **spp. n.** Australia p. 102, LEA Trans. R. Soc. S. Aust. **36** 1912.

Tepalicus **gen. n.** p. 107, *semicalvus* **sp. n.** Queensland p. 108, LEA t.c.

Terporopus **gen. n.** *tenuicornis* **sp. n.** Queensland p. 129, LEA t.c.

Tetengia **gen. n.**, *solenopa* **sp. n.** W. Australia p. 106, LEA t.c.

Tetratopus scabrirostris **sp. n.** (with **ab. n.** *monomorphus*) Philippines p. 300, HELLER Phil. J. Sci. **25.**

Thylacites subpunicus p. 372, *antoinei* p. 373, **spp. n.** Morocco, ESCALERA Bol. R. Soc. esp. H. n. **24.**

Thymapion **subgen. n.** see *Apion.*

Timola dentata p. 66, *fulvonotata* p. 67 **spp. n.** French & Belgian Congo, HUSTACHE Rev. zool. afr. **12.**

Titanobaris **gen. n.** *flavescens* p. 389 (with **var. n.** *lineata*), *gratiosa* p. 390, *maculata* p. 391 **spp. n.** Belgian Congo, HUSTACHE t.c.

Tychius galloprovincialis **sp. n.** France p. 248, HUSTACHE Bull. Soc. ent. Fr. **1923.**—*T. maynéi* **sp. n.** Belgian Congo p. 65, HUSTACHE Rev. zool. afr. **12.**—*T.*, biology pp. 182–185, URBAN Ent. Bl. **20.**

Tyriotes elegans **sp. n.** Belgian Congo p. 369, HUSTACHE Rev. zool. afr. **12.**

Trachyphloeus confusus **sp. n.** fig. France p. 246, HUSTACHE Bull. Soc. ent. Fr. **1923.**—*T. thessalicus* **sp. n.** Thessaly p. 85, PENECKE Wiener ent. Ztg. **41.**

Trigonobaris subsericea **sp. n.** Belgian Congo p. 388, HUSTACHE Rev. zool. afr. **12.**

Tropiphorus moldavicus **sp. n.** Bukowina p. 110, PENECKE Wiener ent. Ztg. **41.**

Zantoidus alboscutellatus, niger **spp. n.** Belgian Congo p. 358, HUSTACHE Rev. zool. afr. **12.**

Zenoporoterus **gen. n.** *mirus* **sp. n.** N.S.W. p. 135, LEA Trans. R. Soc. S. Aust. **36** 1912.

SCOLYTIDAE.

Ipidae of Sicily pp. 114–118, RAGUSA Boll. Soc. ent. ital. **56.**

Geographical distribution of Ipidae p. 14, WICHMANN Zool. Anz. **61.**

Carphoborus blaisdelli California p. 234, *dunni* N. Brunswick, *sansoni* Alberta p. 235, *ponderosae* Br. Columbia p. 236, **spp. n.**, SWAINE Can. Ent. **56.**

Chortastus similis, medius **spp. n.** Congo p. 100, EGGERS Ent. Bl. **20.**

Coccotrypes congonus p. 104, *nigripes* p. 105, **spp. n.** Belgian Congo, EGGERS t.c.

Dryocoetes congonus, dubius **spp. n.** Belgian Congo p. 105, EGGERS t.c.

Hylesinus horridus **sp. n.** Congo p. 99, EGGERS t.c.

Ips pilosus **sp. n.** Belgian Congo p. 106, EGGERS t.c.—*I.* key p. 71, *confusus* adult described, *lecontei* Arizona, *cloudcrofti* Ottawa, **spp. n.** p. 70, SWAINE Can. Ent. **56.**—*I. plastographus, radiatae* life-history and habits pp. 382–390 fig., TRIMBLE Ann. Ent. Soc. Amer. **17.**

Leperisinus orni, fraxini, biology pp. 225–228, SIMMEL Ent. Bl. **20.**

Myelophilus minor, piniperda, feeding habits pp. 166–170, WOLF Ent. Bl. **20.**

Phloeosinus rubicundulus p. 144, *nitidus* p. 145, *antennatus* p. 146, *fulgens* p. 147, *russus* U.S.A., *scopulorum* Br. Columbia p. 148, **spp. n.** SWAINE Can. Ent. **56.**

Premnobius circumspinatus, sex, spinosus **spp. n.** Belgian Congo p. 107, EGGERS Ent. Bl. **20.**

Scierus pubescens **sp. n.** Alberta p. 287, SWAINE Can. Ent. **56.**

Scolytoplatypus armatus **sp. n.** Belgian Congo p. 109, EGGERS Ent. Bl. **20.**

Sphaerotrypes brunneus **sp. n.** S.W. Africa p. 98 fig., HEYMONS Mitt. zool. Mus. Berlin **10** 1921.

Stephanoderes hampei bibliography pp. 238–239, Meded. Koffiebessenboeboek-Fonds Soerabaya no. **9** 1924; bionomics in Java pp. 261–286, FRIEDERICHS op. cit. no. **11**; biology, ecology pp. 1–94, LEEFMANS Meded. Inst. Plantenziekt. no. **57** 1923; control pp. 1–99, LEEFMANS op. cit. no. **62.**—

S. largipennis **sp. n.** Brazil p. 354 fig., de TOLEDO PIZA Rev. Soc. rur. brasil. **5.**—*S. punctatus* p. 101, *magnus, sassaënsis* p. 102, *agnatus, uniseriatus* p. 103, *polyphagus* p. 104, **spp. n.** Belgian Congo, EGGERS Ent. Bl. **20.**—*S. coffeae* (= *Xyleborus cofeicola*) p. 316, *polyphagus* (**sp. n.** Jornal do Commercio 19 October 1924), *fallax* **n.n.** for (Jornal do Brasil 23 October 1924), further described p. 414 (fig.), MOREIRA DA COSTA LIMA Chacaras e Quintaes **30.**

Taphrorychus villifrons new to Britain p. 118, DONISTHORPE Ent. Rec. **36.**

Thamnurgus africanus **sp. n.** Belgian Congo p. 108, EGGERS Ent. Bl. **20.**

Xyleborus cofeicola **sp. n.** Brazil p. 67, CAMPOS NOVAES Bol. Agric. S. Paulo **23** 1922.—*X. adjunctus* p. 108, *barumbuensis* p. 109, **spp. n.** Belgian Congo, EGGERS Ent. Bl. **20.**—*X. cofeicola* see *Stephanoderes coffeae.*

PLATYPODIDAE.

Crossotarsus schoutedeni p. 123, *excavatus, interruptus* p. 124, **spp. n.** *crinitus* **var. n.** *dubius, ve-grandis* **sp. n.** p. 126, Belgian Congo, *rapax* p. 127, *marshalli* S. Rhodesia p. 128, **spp. n.**, WINN-SAMPSON Rev. zool. afr. **12.**

Platypus fecundus Belgian Congo p. 130, *mordax* Gold Coast p. 131, **spp. n.**, WINN-SAMPSON Rev. zool. afr. **12.**—*P. varius* **sp. n.** S. Africa p. 545, WINN-SAMPSON Ann. Mag. N. H. (9) **14.**

BRENTHIDAE.

Myrmecophily in Brenthidae, KLEINE Zool. Jahrb. Abt. System. **49** p. 197 figs.

Cerobates conveniens p. 100, *copiosus* p. 101, *dilutus* p. 102, *fortunatus* p. 103, **spp. n.** Belgian Congo, KLEINE Stett. ent. Ztg. **84.**

Cordus bellatorius **sp. n.** N. Kamerun, Belgian Congo p. 105, KLEINE t.c.

Cyphagogus hauseri **sp. n.** New Guinea p. 33, KLEINE Soc. ent. **39.**

Glaucocephalus controversus **sp. n.** Congo p. 98, KLEINE Stett. ent. Ztg. **84.**

Kleinëella fraterna **sp. n.** New Guinea p. 33, KLEINE Soc. ent. **39.**

Microtrachelizus copulatus p. 103, *fractus, captiosus* p. 104, **spp. n.** Belgian Congo & Kameruns, KLEINE Stett. ent. Ztg. **84.**

Miolispa frivola **sp. n.** German New Guinea p. 33, KLEINE Soc. ent. **39.**

Mygaleicus corneolus **sp. n.** Congo p. 107 figs., KLEINE Stett. ent. Ztg. **84.**

Pithoderes corporatus **sp. n.** Belgian Congo p. 108 fig., KLEINE t.c.

Rhytidopterus dilectus, dilucidus **spp. n.** Belgian Congo p. 99, KLEINE t.c.

Schizoadidactus contumax **sp. n.** Congo p. 98 fig., KLEINE t.c.

Spatherhinus directus **sp. n.** Belgian Congo p. 106 figs., KLEINE t.c.

ANTHRIBIDAE.

Achoragus pumilio p. 229, *tantillus* p. 230, **spp. n.** Rodriguez, JORDAN Nov. zool. **31.**

Acorynus labidus Ceylon, *cruralis* Philippines, **spp. n.** p. 231, JORDAN t.c.

Anthribisomus maculatus p. 258, *corticeus, xylophagus* p. 259, **spp. n.** New Caledonia, JORDAN t.c.

Antioxenus **gen. n.** *bennigseni* **sp. n.** New Guinea p. 235, JORDAN t.c.

Apatenia fastigata **sp. n.** Formosa p. 236, JORDAN t.c.

Apolectella corporaali **sp. n.** Sumatra p. 245, JORDAN t.c.

Araecerus arafurus p. 246, *notandus* p. 248, *corporaali* p. 249, *mordellinus* p. 250 Malay Arch., *omphalus, silex* p. 246, *suavis* p. 248, *rotundatus, cyrtus* p. 249 Papuan group, *pumilus* Ceylon, *bradytus* S. India p. 247, *greenwoodi* p. 246, *nitidus* p. 250 Fiji, *levipennis* Philippines p. 248, **spp. n.**, JORDAN t.c.

Araeocorynus corismus, brachyurus **spp. n.** New Guinea p. 245, JORDAN t.c.

Autotropis **gen. n.** *modesta* p. 241 (with **subspp. n.** *rugulosa* Philippines, *limbata* Sumatra), *fraterna* Perak, *downingi* S. India p. 242, **spp. n.**, JORDAN t.c.

Basitropis papuensis, dolosa New Guinea, *epipona* Queensland **spp. n.** p. 243, JORDAN t.c.

Caccorhinus lateralis S. India p. 243, *murinus* Wetter Is., *didymus* N.S.W. p. 244, **spp. n.**, JORDAN t.c.

Caranistes annulatus see *Dinephrius.*

Cercomorphus pectinator **sp. n.** fig. N. Africa p. 63, DE PEYERIMHOFF Bull. Soc. ent. Fr. **1924.**

Commista baccula, grisea **spp. n.** Australia p. 236, JORDAN Nov. zool. **31.**

Deropygus didymus, simplex p. 251, *spilosus* p. 253, *giton* p. 255 Perak, *truncatus* Borneo p. 251, *elegans, gracilis* p. 252, *arcus* Philippines, *acutus* Aru, *hercules* no locality p. 254 **spp. n.,** JORDAN t.c.

Dinephrius **gen. n.** for *Caranistes annulatus* Waterh. p. 227, *mauritius* **sp. n.** Rodriguez p. 228, JORDAN t.c.

Dysnos notatus **sp. n.** Philippines p. 608, JORDAN Ann. Mag. N. H. (9) **13.**

Eucorynus crassicornis in burrows of *Xylocopa aestuans* India p. 150, BLAIR Trans. Ent. Soc. **1924.**

Euparius annulipes **sp. n.** Paraguay p. 244, JORDAN Nov. zool. **31.**

Exillis impunctatus **sp. n.** (with **subsp. n.** *grisescens*) Philippines p. 39, WOLFRUM Ent. Mitt. **13.**

Gibber frenatus, callistus **spp. n.** Assam p. 238, JORDAN Nov. zool. **31.**

Gulamentus taeniatus **sp. n.** Kamerun p. 237, JORDAN Nov. zool. **31.**

Homoeodera snelli **sp. n.** Rodriguez p. 229, JORDAN t.c.

Hormiscops thomasseti **sp. n.** Rodriguez p. 227, JORDAN t.c.

Hucus proles **subsp. n.** *balius* Philippines p. 233, JORDAN t.c.—*H. constrictus* **sp. n.** Philippines p. 35, WOLFRUM Ent. Mitt. **13.**

Idiopus brevis **sp. n.** New Guinea p. 237, JORDAN Nov. zool. **31.**

Litocerus plagiatus **subsp. n.** *vagulus, confatalis* Philippines, *stichus* Kameruns **spp. n.** p. 232, JORDAN Nov. zool. **31.**

Melanopsacus **gen. n.** p. 608, *fortis, lapillus* p. 609, *nox* p. 611 Perak, *calculus* p. 610, *atratus* p. 611 Borneo, *anthracinus* p. 612, *minutus, gagates* p. 613, *subfasciatus* Sikkim, *specialis* p. 614 Travancore, *difficilis* p. 615 Queensland, *gravatus, vestitus* p. 616 Philippines, *pusillus, nanus* p. 617 Perak, *veitchi* p. 618 Fiji, *latifrons* p. 619 Bolivia, **spp. n.,** JORDAN Ann. Mag. N. H. (9) **13.**—*M. funebris* **sp. n.** Luzon p. 255, JORDAN Nov. zool. **31.**

Ormiscus micula p. 239, *conis* p. 240, **spp. n.** West Indies, JORDAN Nov. zool. **31.**

Phaeochrotes anisus **sp. n.** Philippines p. 234, JORDAN t.c.

Platyrrhinus resinosus early stages p. lxx, DONISTHORPE Trans. Ent. Soc. London **1923** 1924.

Plintheria dufouri p. 234, *subtilis* p. 235, **spp. n.** New Caledonia, JORDAN Nov. zool. **31.**

Proscoporhinus apicatus **sp. n.** New Caledonia p. 257, JORDAN t.c.

Proscopus **gen. n.** *veitchi* **sp. n.** Fiji p. 256, JORDAN t.c.

Talpella **gen. n.** *atra* **sp. n.** Rodriguez p. 228, JORDAN t.c.

Telphes **gen. n.** (near *Protaedus* Pascoe) p. 35, *mannulus* p. 36, *matertera, albimaculosus* p. 37, *pubisparsus, frontaltus* p. 38, **spp. n.** Philippines, WOLFRUM Ent. Mitt. **13.**

Tropideres bolinus **sp. n.** Dehra Dun p. 233, JORDAN Nov. zool. **31.**

Xenocerus dacrytus p. 240, *ancyra* p. 241 **spp. n.,** *scalaris* **subsp. n.** *confertus* p. 240, Philippines, JORDAN t.c.

Zygaenodes helmiscus **n.n.** for *cristatus* Wolfr. 1922 p. 35, WOLFRUM Ent. Mitt. **13.**

PRIONIDAE.

Archodontes aridus **sp. n.** Arizona p. 224, CASEY Mem. Col. **11.**

Mallodon castaneum **sp. n.** Calif. p. 225, CASEY t.c.

Prionellus **subgen. n.** see *Prionus.*

Prionus, flight, p. 80, MARIÉ Bull. Soc. ent. Fr. **1924.**—*P. coriarius* sound production p. 181 figs., BAUDRIMONT Proc.-verb. Soc. linn. Bordeaux **75** 1923. —*P.* keys to subgenn. & spp. p. 208, *Prionellus* **subgen. n.** p. 209, *frosti* p. 210, *nigrescens, densus* p. 211 **spp. n.**; (*Prionus*) *serriger, suspectus* p. 215, *orbiceps, humeralis* p. 216, *scutellaris* p. 219, *spaldingi, fontinalis, stultus* (with **subsp. n.** *parvicollis* p. 222) p. 221, *nanus* p. 222 **spp. n.**; *crassicornis* **subsp. n.** *compar*; *curvatus* **subsp. n.** *ovipennis* p. 217; *fissifrons* **subsp. n.** *coloradensis* p. 218; *ineptus* **subsp. n.** *ambiguus* p. 219; *angustulus* **subsp. n.** *uintanus* p. 220; (*Neopolyarthron*) *robustus* p. 222, (*Antennalia*) *thoracicus* p. 223, **spp. n.** N. America, CASEY Mem. Col. **11.**

Tragosoma repens **sp. n.** Utah p. 226, CASEY Mem. Col. **11.**

CERAMBYCIDAE.

Species of Longicorn beetles with chitinous tracheal hairs, PORTER Rev. chil. H. n. **27** pp. 97–98.

Histoire naturelle des Longicornes de France, PLANET Paris Lechevalier 1924 386 pp. 3 pls. 301 figs.

Acmaeops scutellata **sp. n.** Idaho p. 276, CASEY Mem. Col. **11.**

Amannus brevis **sp. n.** Utah p. 267, CASEY t.c.

Anastrangalia **subgen. n.** see *Strangalia.*

Ancylocera bicolor **subsp. n.** *spissicornis* Florida p. 262, CASEY Mem. Col. **11.**

Aneflomorpha parowana p. 242, *testacea, rectilinea, gilana* p. 243, **spp. n.** N. America, CASEY t.c.

Aneflus sonoranus **sp. n.** Arizona p. 241, CASEY t.c.

Anocomis ampla **ff. n.** *conformis, arizonae* p. 236, *obliviosa, terracensis, basalis* p. 237; *canadensis* **sp. n.** p. 238 N. America, CASEY t.c.

Anoplistes ephippium **var. n.** *coreanum* Quelpart Island p. 191 fig., OKAMOTO Bull. Agric. Expt. Sta. Govt. Gen. Chosen **1.**

Anoplium huachucae, subtropicum p. 245, *politum, quadricolle, linelli* p. 246, *tuckeri, nanulum* p. 247, *rinconium* p. 248, **spp. n.** N. America, CASEY Mem. Col. **11.**

Anubis cyaneus **sp. n.** Annam p. 15, PIC Mél. exot. ent. **41.**

Asemum carolinum, stocktonense **spp. n.** N. America p. 227, CASEY Mem. Col. **11.**

Batyleoma remota **sp. n.** Utah p. 264, CASEY t.c.

Bothriospila **gen. n.** p. 1, *elegans* **sp. n.** p. 2 fig. Brazil, AURIVILLIUS Ark. Zool. **15** no. 25.

Brachyleptura **subgen. n.** *Stictoleptura* type *cribripennis* p. 280, **subsp. n.** *divisa* p. 281, N. America, CASEY Mem. Col. **11.**

Brachysomida aterrima **sp. n.** Canada p. 276, CASEY t.c.

Brothylus castaneus p. 253, *consors, longicollis* p. 254, **spp. n.** N. America, CASEY t.c.

Callimoxys pinorum **sp. n.** N. Carolina p. 261, CASEY t.c.

Cercolia kempiana **sp. n.** New York p. 282, CASEY t.c.

Chion filicorne **sp. n.** N. Carolina p. 256, CASEY t.c.

Chloridolum sieversi **var. n.** *coreanum* Quelpart Island p. 190 fig., OKAMOTO Bull. Agric. Expt. Sta. Govt. Gen. Chosen **1.**

Chlorophorus varius **var. n.** *incanus* Caucasus p. 229, PLAVILSTSHIKOV Ann. Mag. N. H. (9) **13.**

Clytanthus trifasciatus **var. n.** *paradoxus* France p. 78, DAYREM Misc. ent. **27.**—*C. japonicus* **varr. n.** *latepubens* p. 15, *griseobimaculatus* China, *rufotinctus; savioi, sulcaticeps* **spp. n.** p. 16; *varius* **var. n.** *pieli* p. 15 Shanghai, PIC Mél. exot. ent. **41.**

Cosmosalia auripilis **subsp. n.** *densepilosa* Utah p. 281, CASEY Mem. Col. **11.**

Criocephalus elongatus, propinquus p. 230, *coloradensis, uteanus, champlainianus* p. 231, **spp. n.** N. America, CASEY t.c.

Crossidius curticollis, parallelus p. 265, *vinosus, hirsuticollis* p. 266, **spp. n.** N. America, CASEY t.c.

Cyrtoclytus capra **ab. n.** *inbasalis* Manchuria p. 229, PLAVILSTSHIKOV Ann. Mag. N. H. (9) **13.**

Debilissima atripes Laos, *testacea* China **spp. n.** p. 15, PIC Mél. exot. ent. **41.**

Demonax frater (fig.), *confinis* p. 10, *recurvus* p. 11 Philippines, *unicolor* Borneo p. 13, **spp. n.**, AURIVILLIUS Ark. Zool. **15** no. 25.

Dere virescens **sp. n.** Philippines p. 8, AURIVILLIUS Ark. Zool. **15** no. 25.

Distenia levitemporalis **sp. n.** Philippines p. 163, HELLER Wiener ent. Ztg. **41.**—*D. sumatrensis* **sp. n.** Sumatra p. 236, SCHWARZER Treubia **5.**

Eburia quadricollis, densa **spp. n.** Texas p. 259, CASEY Mem. Col. **11.**

Eligmoderma key p. 6, *trifasciatum* p. 4 Venezuela, *spinicolle* Colombia, *convexicolle* Venezuela p. 5, **spp. n.**, AURIVILLIUS Ark. Zool. **15** no. 25.

Epania key p. 29, *aurocollaris* **sp. n.** (with **subsp. n.** *sibuyana*) p. 28, *pallescens* Philippines, *petra* Borneo p. 29 **spp. n.**, HELLER Ent. Bl. **20.**

Eucrossus phoenicis **sp. n.** Arizona p. 249, CASEY Mem. Col. **11.**

Euryptera subintegra **sp. n.** N. Carolina p. 285, CASEY t.c.

Euryscelis megalopus, subtropica **spp. n.** Florida p. 271, CASEY t.c.

Evodinus carolinensis **sp. n.** N. Carolina p. 275, CASEY t.c.—*E. interrogationis* **abb. n.** *quadripunctatus* p. 226, *recurvatus, anticeconfluens, posticeconfluens, confluens, lateralis*; *variabilis* **ab. n.** *quinquemaculatus* p. 227 Siberia, PLAVILSTSHIKOV Ann. Mag. N. H. (9) **13.**

Haplidus breviceps **sp. n.** New Mexico p. 250, CASEY Mem. Col. **11.**

Hylotrupes bajulus **ff. n.** *inaequalis, latus* p. 233, *nematocerus, puncticollis, incertus* p. 234, *pedicellatus*; *minutus* **sp. n.** p. 235 N. America, CASEY t.c.

Hypermallus obsolescens **sp. n.** Pennsylvania p. 244, CASEY t.c.

Ibidion pubescens **sp. n.** Texas p. 260, CASEY t.c.

Iphra quadriguttata **sp. n.** Borneo p. 196 fig., HELLER Ent. Mitt. **13.**

Jonthodes formosa **var. n.** *ugandica* Uganda p. 7, AURIVILLIUS Ark. Zool. **15** no. 25.

Judolia vivarium p. 282, *seminigra, deceptiva* p. 283, *longior, minuta* p. 284, **spp. n.** U.S.A., CASEY Mem. Col. **11.**

Leptacmaeops suturalis, stolida **spp. n.** U.S.A. p. 277, CASEY t.c.

Leptepania **gen. n.** near *Epania* with type (*Epania ?*) *longicollis* Heller p. 30, HELLER Ent. Bl. **20.**

Leptura (s. str.) *suberis* ♀ p. 35, ♂ **var. n.** *chobauti* p. 36, Algeria, DAYREM Misc. ent. **28.**

Malobidion uteanum **sp. n.** Utah p. 258, CASEY Mem. Col. **11.**

Mantitheus gracilis **sp. n.** China p. 79, PIC Bull. Soc. ent. Fr. **1924.**

Merionoeda basalis Sumatra p. 6, *nigricollis* Borneo p. 7, **spp. n.**, AURIVILLIUS Ark. Zool. **15** no. 25.—*M.* key p. 32, *atricollis, punctifrons* Borneo p. 31, *formosana* Formosa p. 32, **spp. n.**, HELLER Ent. Bl. **20.**

Methia delicata, flavicornis **spp. n.** U.S.A. p. 257, CASEY Mem. Col. **11.**

Molochrus **gen. n.** *viridicollis* **sp. n.** Borneo p. 27, HELLER Ent. Bl. **20.**

Neoclytus provoanus **sp. n.** Utah p. 272, CASEY Mem. Col. **11.**

Odontocerus phungi, diversithorax **spp. n.** Tonkin p. 32, PIC Mél. exot. ent. **42.**

Oeme minutivestis p. 251, *deserta, incertula* p. 252, *subobsoleta, truncata* p. 253, **spp. n.** N. America, CASEY Mem. Col. **11.**

Oligoenoplus variicornis **sp. n.** Borneo p. 12, AURIVILLIUS Ark. Zool. **15** no. 25.

Opsimus quadrilineatus **subsp. n.** *biplectralis* California p. 229, CASEY Mem. Col. **11.**

Osmidus obscurellus, vestitus **spp. n.** Arizona p. 255, CASEY t.c.

Oxoplus parviceps **sp. n.** Utah p. 264, CASEY t.c.

Pantomallus pallidus **sp. n.** Brazil p. 4, AURIVILLIUS Ark. Zool. **15** no. 25.

Paranoplium **gen. n.** p. 250, *densicolle* **sp. n.** N. America p. 251, CASEY Mem. Col. **11.**

Phymatodes frosti, collaris **spp. n.** U.S.A. p. 240, CASEY t.c.

Physocnemum pictum, longitarse, angulatum **spp. n.** N. America p. 239, CASEY t.c.

Plagionotus pulcher **ab. n.** *recurvatus* Siberia, *arcuatus* **ab. n.** *disjunctus* Transcaucasia p. 229, PLAVILSTSHIKOV Ann. Mag. N. H. (9) **13.**

Poecilobrium minutum **sp. n.** California p. 261, CASEY Mem. Col. **11.**

Pseudibidion pertenue **sp. n.** Florida p. 248, CASEY t.c.

Psilomerus albifrons Borneo p. 8, *apicalis* S. India, *simplex* Borneo p. 9, **spp. n.**, AURIVILLIUS Ark. Zool. **15** no. 25.

Rhagium bifasciatum **ab. n.** *ictericum* Hamburg p. 38, SCHLEICHER Ent. Anz. **4.**

Rhaphuma rufobasalis **sp. n.** Tonkin p. 16, PIC Mél. exot. ent. **41.**

Saperda uteana **sp. n.** Utah p. 294, CASEY Mem. Col. **11.**

Sphinctodere **gen. n.** p. 13, *coerulescens* (fig.), *vittata* **spp. n.** Borneo p. 14, AURIVILLIUS Ark. Zool. **15** no. 25.

Spondylis parva **sp. n.** U.S.A. p. 227, CASEY Mem. Coll. **11.**

Stenaspis insignis **sp. n.** Texas p. 262, CASEY t.c.

Stenhomalus flavicollis **sp. n.** Sumatra p. 25, AURIVILLIUS Zool. Meded. **8.**—*S. v-fuscum* **sp. n.** Philippines p. 196, HELLER Ent. Mitt. **13.**

Stenocorus uteanus, plagiatus p. 273, *morio, marginellus* p. 274, **spp. n.** N. America, CASEY Mem. Col. **11.**

Stenosphenus pinorum p. 268, *castaneus* p. 269, **spp. n.** U.S.A., CASEY t.c.

Stictoleptura **subgen. n.** see *Brachyleptura.*

Strangalia **subgen. n.** *Anastrangalia, apicata* p. 280, *serricornis* p. 279, **spp. n.** N. America, CASEY Mem. Col. **11.**—*S. quadrifasciata* **subsp. n.** *caucasica* **abb. n.** *recurvata, disjuncta, biinterrupta* Caucasus p. 226; *thoracica* **abb. n.** *pliginskii* p. 227, *basalis*; *septempunctata* **abb. n.** *panini, nigrithorax*; *attenuata* **ab. n.** *shushenicae* p. 228 Russia; *quadrifasciata quadrifasciata* **ab.** *divisa* **n.n.** for **var.** *interrupta* Heyden (nec Newm.) p. 233, PLAVILSTSHIKOV Ann. Mag. N. H. (9) **13.**

Taranomis cylindricollis, nematocera **spp. n.** Arizona p. 267, CASEY Mem. Col. **11.**

Tetraommatus apicalis **sp. n.** Sumatra p. 236, SCHWARZER Treubia **5.**

Tetropium hexagonum, boreale **spp. n.** U.S.A. p. 228, CASEY Mem. Col. **11.**

Tragidion parowanum **sp. n.** Utah p. 263, CASEY t.c.

Trirachys gloriosus **sp. n.** Philippines p. 3, AURIVILLIUS Ark. Zool. **15** no. 25.

Typocerus arapahoe **sp. n.** Colorado p. 278, CASEY Mem. Col. **11.**

Xestoleptura pictipennis **sp. n.** Idaho p. 285, CASEY t.c.

Xylotrechus biimpressus **sp. n.** fig. Java p. 8, AURIVILLIUS Ark. Zool. **15** no. 25.—*X. uniformis* **sp. n.** Oregon p. 270, CASEY Mem. Col. **11.**—*X. grumi* **ab. n.** *bimaculatus* Turkestan p. 228, PLAVILSTSHIKOV Ann. Mag. N. H. (9) **13.**

Xystrocera brunnea **sp. n.** Sumatra p. 25, AURIVILLIUS Zool. Meded. **8.**

Zoocosmius masoni **sp. n.** B. E. Africa p. 15, AURIVILLIUS Ark. Zool. **15** no. 25.

LAMIIDAE.

Abryna javanica **sp. n.** Java p. 353, KRIESCHE D. ent. Zs. **1924.**—*A. ziczac, apicalis* **spp. n.** Philippines p. 201 fig., HELLER Ent. Mitt. **13.**

Acanthoderes latevittata **sp. n.** Brazil Bolivia p. 35 fig., AURIVILLIUS t.c.

Acmocera biplagiata **sp. n.** Congo p. 28 fig., AURIVILLIUS t.c.

Adesmus brunneus **sp. n.** Colombia p. 42, AURIVILLIUS Ark. Zool. **15** no. 25.

Aethalodes formosanus **sp. n.** Formosa p. 285, KRIESCHE D. ent. Zs. **1924.**

Agelasta humeralis **sp. n.** Philippines p. 198, HELLER Ent. Mitt. **13.**—*A. villosicornis* p. 24, *bizonata* p. 25, **spp. n.** Philippines, AURIVILLIUS Ark. Zool. **15** no. 25.

Analeptes giraffa **sp. n.** Somaliland p. 287, *trifasciata* **subspp. n.** *interior, jendina* p. 288, *misana* p. 289 Togo, KRIESCHE D. ent. Zs. **1924.**

Anancylus granulosus **sp. n.** Sumatra p. 237, SCHWARZER Treubia **5.**

Anexodus kuntzeni **sp. n.** Borneo p. 291, KRIESCHE D. ent. Zs. **1924.**

Anhammus regularis **sp. n.** Sumatra p. 26, AURIVILLIUS Zool. Meded. **8.**

Archidice fimbriata **subsp. n.** *sumatrana* Deli p. 287, KRIESCHE D. ent. Zs. 1924.

Aristobia pallida **sp. n.** Sumatra p. 28, AURIVILLIUS Zool. Meded. **8.**

Ataxia hubbardi **sp. n.** Arizona p. 253, FISHER Can. Ent. **56.**

Atelais (?) *bipunctata, mediomaculata* p. 209, *surigaonis, annulata* (with **subsp. n.** *deserta*), *laterimaculata* p. 210, *roseolata, bifasciata* p. 211 fig. Philippines, HELLER Ent. Mitt. **13.**

Brachyhomonoea **gen. n.** p. 30, *conspersa* **sp. n.** Philippines p. 31, AURIVILLIUS Ark. Zool. **15** no. 25.

Cacia aequifasciata **sp. n.** Philippines p. 164, HELLER Wiener ent. Ztg. **41.**—*C. butuana* **subsp. n.** *negria* Philippines p. 198, HELLER Ent. Mitt. **13.**

Celosterna fasciculata **sp. n.** Sumatra p. 28, AURIVILLIUS Zool. Meded. **8.**

Cereopsius octomaculatus, guttulatus **spp. n.** Borneo p. 22, AURIVILLIUS Ark. Zool. **15** no. 25.

Ceroplesis elgonensis **sp. n.** E. Africa p. 27, AURIVILLIUS t.c.

Choeromorpha semivittata **sp. n.** Philippines p. 25, AURIVILLIUS t.c.

Cubilia obscura **sp. n.** Nyasaland p. 32, AURIVILLIUS t.c.

Cylindroplocia **gen. n.** near *Plocia* p. 205, *pseudobityle* **sp. n.** (with **ab. n.** *crucifera*), *basimaculata* (with **ab. n.** *teres* p. 207), *alboscutellaris* p. 206, *modesta* p. 207 **spp. n.** Philippines, fig., HELLER Ent. Mitt. **13.**

Cylindropomus cyaneus **sp. n.** Tonkin p. 16, PIC Mél. exot. ent. **41.**

Cyriocrates horsfieldi **subsp. n.** *tonkinensis* Tonkin p. 287, KRIESCHE D. ent. Zs. **1924.**

Daphisia discimaculata Philippines, *cinerea* Java **spp. n.** p. 41, AURIVILLIUS Ark. Zool. **15** no. 25.

Dasylinda testa **var. n.** *apicalis* Sumatra p. 34, AURIVILLIUS Zool. Meded. **8.**

Diastocera wallichi **subsp. n.** *tonkinensis* Tonkin p. 289, KRIESCHE D. ent. Zs. **1924.**

Dihammus sculpturatus Java p. 18, *riouensis* Riou Islands, *laevifrons* Sumatra p. 19, **spp. n.** fig. AURIVILLIUS Ark. Zool. **15** no. 25.

Diochares nitidus **sp. n.** New Guinea p. 16 fig., AURIVILLIUS t.c.

Doliops bakeri **sp. n.** Philippines p. 204, HELLER Ent. Mitt. **13.**

Dorcadion crux **var. n.** *rhodicum* Rhodes p. 43, DEPOLI Boll. Soc. ent. ital. **56.**—*D.*, list of Spanish spp. p. 191, *dispersepunctatus* p. 195, *loroi* p. 196, *saturioi* p. 198 **spp. n.**; *graellsi* **var. n.** *tenuilineatum* p. 196; *pseudomolitor* **var. n.** *nigritulus* p. 197; *villosladense* **varr. n.** *nivosus* p. 198, *rufipedes, obscuratus, circumalbum* p. 199, *nigratum*; *dejeani* **varr. n.** *albolineatum, carbonicum* p. 200 Spain, ESCALERA Bol. Soc. esp. Hist. nat. **24.**—*D. rufifrons* **abb. n.** *zhuravlevi, indorsalis, lividesuturatum* Russia p. 229, PLAVILSTSHIKOV Ann. Mag. N. H. (9) **13.**

Dorcaschesis **gen. n.** near *Cylindrepomus, sericata* **sp. n.** Philippines p. 199, HELLER Ent. Mitt. **13.**

Egesina ? cylindrica **sp. n.** Simalur Is. p. 19, AURIVILLIUS Zool. Meded. **8.**

Epepeotes lateralis **var. n.** *niasica* Nias Is. p. 16, AURIVILLIUS Ark. Zool. **15** no. 25.—*E. luscus* **ab. n.** *flavomaculatus* Sumatra p. 27, AURIVILLIUS Zool. Meded. **8.**

Epilysta (?) *guttata, bifasciata* **spp. n.** Philippines p. 33, AURIVILLIUS Ark. Zool. **15** no. 25.

Eunidia trifasciata **sp. n.** B. E. Africa p. 32, AURIVILLIUS t.c.

Falsonandra **gen. n.** (near *Anandra*) *albocincta* **sp. n.** Tonkin p. 17, PIC Mél. exot. ent. **41.**

Glenea key to Philippine p. 40, *sordida* p. 36, *artemis, gracilis, commixta* p. 37, *univittata, tritoleuca* p. 38, **spp. n.**, *versuta* **abb. n.** *bipunctata, fasciolata, basalis* **sp. n.** p. 39 Philippines, AURIVILLIUS Ark. Zool. **15** no. 25.—*G. jacobsoni* Simalur Is., *babiana* Simalur Is., Pulo Babi p. 21, *simalurica* Pulo Babi p. 22, *conspersa, dempoana* p. 33 Sumatra, **spp. n.**, AURIVILLIUS Zool. Meded. **8.**

Gnoma vittaticollis **sp. n.** Borneo p. 23 fig., AURIVILLIUS Ark. Zool. **15** no. 25.

Graphisurus obtusus p. 292, *punctatus* p. 293, **spp. n.** U.S.A., CASEY Mem. Col. **11.**

Hedypathes curvatocostatus **sp. n.** Brazil p. 34 fig., AURIVILLIUS Ark. Zool. **15** no. 25.

Hippocephala lineaticollis **sp. n.** Tonkin p. 17, PIC Mél. exot. ent. **41.**

Iothocera cinerascens **sp. n.** New Guinea p. 15, AURIVILLIUS Ark. Zool. **15** no. 25.

Leiopus crinicornis, nelsonicus **spp. n.** Virginia p. 291, CASEY Mem. Col. **11.**

Leprodera felderi **subsp. n.** *borneotica* Borneo p. 287, KRIESCHE D. ent. Zs. **1924.**

Linda atricornis **sp. n.** Shanghai, *apicalis* **var. n.** *subcincta* Tonkin p. 19, PIC Mél. exot. ent. **41.**

Mecas bicallosa **sp. n.** California p. 244, MARTIN Ent. News **35.**

Melanauster irregularis **sp. n.** Borneo ? p. 19 fig., AURIVILLIUS Ark. Zool. **15** no. 25.

Mesosella latefasciata **sp. n.** China p. 79, PIC Bull. Soc. ent. Fr. **1924.**

Miaenia pulchella **sp. n.** Philippines p. 213 fig., HELLER Ent. Mitt. **13.**

Microloa **gen. n.** (near *Cyrtinus*) p. 19, *niveopunctata* **sp. n.** Simalur Is. p. 20, AURIVILLIUS Zool. Meded. **8.**

Microplocia **gen. n.** (near *Plocia*), *puncticollis* **sp. n.** Philippines p. 208 fig., HELLER Ent. Mitt. **13.**

Mispila philippinica **sp. n.** Philippines p. 204, HELLER Ent. Mitt. **13.**

Moneilema shantzi, *plectralis* p. 286, *obesa*, *lateralis* p. 287, *rugosissima* p. 288, *convexa*, *colossus* p. 289, **spp. n.** U.S.A., CASEY Mem. Col. **11.**

Monochamus baluanus **sp. n.** Borneo p. 17 fig., AURIVILLIUS Ark. Zool. **15** no. 25.—*M. oregonensis* **subsp. n.** *latus*; *titillator* **subsp. n.** *obesus* U.S.A. p. 290, CASEY Mem. Col. **11.**

Mulciber samaranus **sp. n.** Philippines p. 165, HELLER Wiener ent. Ztg. **41.**

Mycerinicella **gen. n.** (near *Eunidia*), *subbifasciata* **sp. n.** Philippines p. 203, HELLER Ent. Mitt. **13.**

Nemophas subterrubens **sp. n.** Philippines p. 164, HELLER Wiener ent. Ztg. **41.**

Niphonoclea principalis **sp. n.**, *rhombifera* **ab. n.** *cordifera* p. 202, *rhombifera* **subsp. n.** *degenerata* p. 203 fig. Philippines, HELLER Ent. Mitt. **13.**

Nitocris strigata **sp. n.** S. Africa p. 42, AURIVILLIUS Ark. Zool. **15** no. 25.

Nyctimene ochraceovittata **varr. n.** *intermedia*, *extrema* Philippines p. 32, AURIVILLIUS t.c.

Oberea simalurica p. 22, *flavogrisea* p. 23 Simalur Is., *cincticollis* p. 34, *tricolor* p. 35 Sumatra, **spp. n.**, AURIVILLIUS Zool. Meded. **8.**—*O. quadricallosa* **subsp. n.** *cylindricollis* p. 295, *praelonga* **subsp. n.** *deficiens* p. 296 U.S.A., CASEY Mem. Col. **11.**—*O. savioi*, *pieli* **spp. n.** Shanghai p. 19, PIC Mél. exot. ent. **41.**

Paralophia **gen. n.** (near *Pterolophia*), *quadrinodosa* **sp. n.** Sumatra p. 30, AURIVILLIUS Zool. Meded. **8.**

Paraplattostoma **gen. n.** (near *Ostraea*) p. 213, *emandibularis* **sp. n.** p. 214 Philippines, HELLER Ent. Mitt. **13.**

Parazygocera **gen. n.** (near *Anacasta*), *späthi* **sp. n.** Philippines p. 200, HELLER Ent. Mitt. **13.**

Perihammus **gen. n.** (near *Mimohammus*), *bifasciatus* **sp. n.** China p. 21, AURIVILLIUS Ark. Zool. **15** no. 25.

Phaea astatheoides **var. n.** *apicalis* vel **sp. n.** Colombia p. 42, AURIVILLIUS t.c.

Phryneta aurocincta **ab. n.** *cingulata* Togo p. 28, AURIVILLIUS t.c.

Plocia diverseguttata **sp. n.** Philippines p. 205, HELLER Ent. Mitt. **13.**

Pogonochoerus kuksha **sp. n.** Transcaucasia p. 225, PLAVILSTSHIKOV Ann. Mag. N. H. (9) **13.**

Pothyne delicata p. 166, *multilineata*, *uniformis* p. 167, *granifrons* p. 168 **spp. n.** Philippines, HELLER Wiener ent. Ztg. **41.**—*P. septemlineata* **sp. n.** Burma p. 33, AURIVILLIUS Ark. Zool. **15** no. 25.—*P. suturalis* **sp. n.** Tonkin p. 17, PIC Mél. exot. ent. **41.**

Pseudomecas pallidicornis **sp. n.** Colombia p. 43, AURIVILLIUS Ark. Zool. **15** no. 25.

Pseudonephelotus **gen. n.** (near *Nephelotus*) p. 236, *albomaculatus* **sp. n.** Sumatra p. 237, SCHWARZER Treubia **5.**

Pterolophia apicalis **sp. n.** Sumatra p. 238, SCHWARZER Treubia **5.**

Rosenbergia scutellaris **sp. n.** New Guinea p. 23 fig., AURIVILLIUS Ark. Zool. **15** no. 25.

Saperda bilineaticollis **sp. n.** Shanghai p. 19, PIC Mél. exot. ent. **41.**

Silgonda **gen. n.** (near *Golsinda*) *rugipes* **sp. n.** Philippines p. 197, HELLER Ent. Mitt. **13.**

Spalacopsis confusa p. 293, *exilis* p. 294, **spp. n.** Florida, CASEY Mem. Col. **11.**

Sphingnotus keyensis **sp. n.** Key Is. p. 237, SCHWARZER Treubia **5.**

Stegenagapanthia **gen. n.** (near *Stegenus*) *albovittata* **sp. n.** Laos p. 18, PIC Mél. exot. ent. **41.**

Tanylecta semifusca **sp. n.** Sumatra p. 31, AURIVILLIUS Zool. Meded. **8.**

Tetraopes latior **sp. n.** Cal. p. 296, Casey Mem. Col. **11.**—*T. tetrophthalmus* oviposition pp. 367–368, Clench Papers Mich. Acad. Sci. **3.**

Thestus (?) *obscurus* **sp. n.** Borneo p. 20 fig., Aurivillius Ark. Zool. **15** no. 25.

Thylactus chinensis Canton p. 289, *lettow-vorbecki* Tanganyika p. 290 **spp. n.**, Kriesche D. ent. Zs. **1924.**

Tmesisternus humeralis **sp. n.** New Guinea p. 31 fig., Aurivillius Ark. Zool. **15** no. 25.

Trachelophora key to species p. 30, *lineata*, *maculosa* Borneo, *niasica* Nias Is. p. 29 **spp. n.**, Aurivillius t.c.

Trachystola bimaculata **sp. n.** Tonkin p. 285, Kriesche D. ent. Zs. **1924.**

Tragocephala gracilis Gabun, *transversefasciata* Delagoa Bay **spp. n.** p. 26 fig., Aurivillius Ark. Zool. **15** no. 25.

Urographis texana **sp. n.** Texas p. 292, Casey Mem. Col. **11.**

Xiphotheata papuana **sp. n.** New Guinea p. 354, Kriesche D. ent. Zs. **1924.**

Zotale luteonotata Tonkin, *spinosa* Laos, **spp. n.** p. 18, Pic Mél. exot. ent. **41.**

Bruchidae.

Bruchus babaulti (with **var. n.** *subelongatus*), *tanaensis* **spp. n.** B. E. Afr. p. 14, Pic Voy. Babault Afr. or. angl. **1921.**—*B. erythraeus* **var. n.** *speculiferus*, *incaeruleus* **var. n.** *lembanus*, *lineatopygus* p. 458, *schoutedeni*, *carinatipes* p. 459, *vanderijsti* p. 460, **spp. n.** Belgian Congo, Pic Rev. zool. afr. **12.**

Pachymerus atricolor **sp. n.** Belgian Congo p. 457, Pic Rev. zool. afr. **12.**—*P. albonotatus* **var. n.** *diversicolor* B. E. Afr. p. 13, Pic Voy. Babault Afr. or. angl. **1921.**—*P. notativentris* India p. 24, *atricornis* Tonkin, *ceylonicus* Ceylon, *crampeli* French Congo p. 25, **spp. n.**, Pic Mél. exot. ent. **42.**

Spermophagus babaulti **sp. n.** B. E. Afr. p. 15, Pic Voy. Babault Afr. or. angl. **1921.**—*S. inlobatus* p. 455, *atriceps*, *maynéi* (with **var. n.** *murtulai*) p. 456, *elisabethae* (with **var. n.** *burgeoni*) p. 457, **spp. n.** Belgian Congo, Pic Rev. zool. afr. **12.**

Donaciidae.

Donacia specific characters p. 36 figs., Ischreyt Zool. Anz. **58.**

Crioceridae.

Brachydactyla fulvicollis **sp. n.** W. Africa p. 299, Bryant Ann. Mag. N. H. (9) **13.**

Crioceris sandakana **n. n.** for *curtipennis* Pic 1921 (nec Pic 1920), *limbatus* **n. n.** for *basalis* Weise 1913 (nec Jacoby 1906), *mutatus* **n. n.** for *chapuisi* Weise 1916 (nec Baly 1877) p. 37, Achard Casopis **21.**

Lema cyanella biology pp. 27–29 fig., Hänsel Zts. wiss. Insektenbiol. **19.**—*L. uzagaraensis* p. 7, *ivoirensis*, *annulicornis*, *favareli*, *pangalana*, *sibutensis*, *rufotriangularis* p. 8, *rufocincta*, *brevelineata* Tropical Africa, *rhobompana* (no locality), *subannulipes* Java, *lateapicalis* Sumatra p. 9, *cyaneopectoralis*, *castaneithorax* p. 10, *binhana*, *tonkinea* p. 11, *lacosa* p. 12, *annulitarsis* p. 13, *demangei*, *major* p. 14 Tonkin, *breveapicalis* Saïgon, *subelongata* p. 10, *viridipennis*, *infranigra* p. 11, *rufolineata* p. 12, *bicolorithorax* p. 13, *forticornis* p. 14 China, *basithorax* Saïgon p. 11, *nigrobimaculata* Siam, *bimaculaticeps* Tibet, *kiotoensis* Japan p. 12 **spp. n.**, Pic Mél. exot. ent. **41.**—*L. segnis*, *ituriana* **spp. n.** p. 2, *planifrons* **ab. n.** *bivittulata* p. 3 C. Africa, Weise Ark. Zool. **16** no. 22.

Clytridae.

Camptolenes bifasciata **sp. n.** Transvaal p. 247, Bryant Ann. Mag. N. H. (9) **14.**

Cyaniris auritoides **sp. n.** Caucasus p. 93, Achard Fragm. ent. **1923.**—*C. socia* p. 4, *plebeja* p. 5, **spp. n.** C. Africa, Weise Ark. Zool. **16** no. 22.

Herma guillielmi **sp. n.** (with **ab. n.** *laeta*) C. Africa p. 3, Weise t.c.

Cryptocephalidae.

Cryptocephalus gamma **subsp. n.** *semilugens* E. Europe p. 23, Dudich Folia ent. hung. **1.**—*C. bifasciatus* **ab. n.** *ituriensis* C. Africa p. 5, Weise Ark. Zool. **16** no. 22.—*C. cynarae* early stages p. 198, Tempère Proc.-verb. Soc. linn. Bordeaux **75.**—*C. pusillus*, key to aberrations, **ab. n.** *milleri* Germany p. 58, Schleicher Ent. Bl. **20.**—*C. dumonti* **sp. n.** N. Africa p. 62 fig., de Peyerimhoff

Bull. Soc. ent. Fr. **1924.**—*C. frenatus* **var. n.** *unicolor* Tiflis p. 66, EICHLER Polsk. Pismo ent. **3.**—*C. trapezensis* **var. n.** *notaticoxis* Trebizond, *mannerheimi* **var. n.** *infrajunctus* Amur, *pallescens* **var. n.** *sterenanus* Siberia, *8-maculatus* **varr. n.** *volviciensis, derivatus, cumaniensis, vittatus* **varr. n.** *reynosensis* p. 17, *lisbonensis, anticus* **var. n.** *babadjanidesi, octogutiatus* **var. n.** *ponferradanus* Europe, *crassus* **var. n.** *japhaaensis* Syria p. 18, PIC Echange **39.**—*C. nicodi* **varr. n.** *immaculatithorax, unirufonotatus*; *euchlorus* **var. n.** *catati*; *majunganus* p. 25, *semicoeruleus, multiluteonotatus* p. 26, *atrotibialis* p. 27, **spp. n.** Madagascar, PIC Mél. exot. ent. **42.**—*C. ocularis, submarginatus* p. 279, *conifer, atropectoralis* p. 280, *decorsei, multiplicatus* p. 281, *descarpentriesi, triluteomaculatus, lantzi* p. 282, *singularipennis, multiundulatus* p. 283, *gaudroni* p. 284, **spp. n.** Madagascar, PIC Bull. Mus. H. n. Paris **1924.**

EUMOLPIDAE.

Abiromorphus **gen. n.** (near *Abirus* Chp.) *anceyi* **sp. n.** China p. 7, PIC Mél. exot. ent. **41.**

Basilepta birungana **sp. n.** C. Africa p. 8, WEISE Ark. Zool. **16** no. 22.

Colaspoides javana **sp. n.** Java p. 235, WEISE Treubia **5.**

Colasposoma benguelanum **n. n.** for *alutaceum* Achard 1923 (nec Jacoby 1900) p. 37, ACHARD Casopis **21.**

Lefevrea signata, humeralis **spp. n.** C. Africa p. 6, WEISE Ark. Zool. **16** no. 22.

Leprotes rufus, submaculatus, rufonotatus **spp. n.** Tonkin p. 6, PIC Mél. exot. ent. **41.**

Mashonania ferruginipes **sp. n.** C. Africa p. 7, WEISE Ark. Zool. **16** no. 22.

Metachroma robusta p. 168, *strigicolle* p. 169, **spp. n.** Florida, BLATCHLEY Can. Ent. **56.**

Nodina chinensis **sp. n.** China p. 248, BRYANT Ann. Mag. N. H. (9) **14.**

Nodonota theobromae Brazil p. 301, *wolcotti* Porto Rico p. 203, **spp. n.**, BRYANT Ann. Mag. N. H. (9) **13.**

Pedrilliomorpha nigrocincta **sp. n.** Tonkin p. 7, PIC Mél. exot. ent. **41.**

Pseudeumolpus javanus Java, *substriatus* Annam, *binhanus* Tonkin, **spp. n.** p. 27, PIC t.c.

Pseudometaxis tonkineus **sp. n.** Tonkin p. 7, PIC t.c.

Rhembastus ituriensis **sp. n.** C. Africa p. 10, WEISE Ark. Zool. **16** no. 22.

Rhyparida mutata **n. n.** for *pallidula* Weise 1922 (nec Lea 1915) p. 37, ACHARD Casopis **21.**

Trichotheca aeneopicta **sp. n.** India p. 300, BRYANT Ann. Mag. N. H. (9) **13.**

Typophorus jamaicensis sp. n. Jamaica p. 247, BRYANT Ann. Mag. N. H. (9) **14.**

CHRYSOMELIDAE.

Eggs of Chrysomelids, BERTRAND Bull. Soc. ent. Fr. **1924** pp. 54–57.

Chrysomelidae of Florida, BLATCHLEY Florida Ent. **7** pp. 33–39 & 49–57; **8** pp. 1–7 & 17–23.

Notes on Chrysomelidae of N. America, SCHAEFFER J. N. Y. Ent. Soc. **32** p. 138.

Ambrostoma fulgurans **sp. n.** China p. 15, ACHARD Fragm. ent. **1922.**

Centroscelis nigripennis, 14-maculata **spp. n.**, *laevigata* **var. n.** *limbaticollis* S. Africa p. 38, ACHARD Casopis **21.**

Chrysomela mandarina **sp. n.** China p. 16, ACHARD Fragm. ent. **1922.**—*C. menthastri* **varr. n.** *elaverensis, tolosana* France p. 89, BUYSSON Misc. ent. **27.**—*C. fastuosa* life history p. 159, DOBSON Entomologist **57.**—*C. graminis* **ab. n.** *semiviolacea,* **varr. n.** *nigrocuprea, taupini* France p. 77, MALLET Misc. ent. **27.**—*C. mancinii* **sp. n.** Italy p. 118, MÜLLER Boll. Soc. ent. ital. **56.**—*C. octocosta, saurica* Asiatic Russia p. 78, *soiota* Siberia p. 80, *cilissa* Asia Minor p. 81, *pavlenkoi* p. 82, *omoka* p. 83 Siberia, **spp. n.**, JACOBSON Wiener ent. Ztg. **41.**—*C. varians* viviparous p. 245 figs., RETHFELDT Zool. Jahrb. **46.**

Chrysomelopsis **gen. n.** p. 26, *ecoffeti* **sp. n.** China p. 27, ACHARD Fragm. ent. **1922.**

Desmogramma various species transferred to *Grammodesma* **gen. n.** and *Grammomades* **gen. n.** p. 72, *Desmogrammella* **subgen. n.** p. 73, *opacipennis* **sp. n.** Brazil p. 73, *fastidita* **var. n.** *semivittata* Bolivia, *violaceipennis, sereipennis* p. 74, *consimilis* p. 75, **spp. n.** Brazil, key p. 76, ACHARD op. cit. **1923.**

Desmogrammella **subgen. n.** see *Desmogramma.*

Deuterocampta notes p. 76, *impictipennis* **var. n.** *virgulata* Brazil p. 77, ACHARD op. cit. **1923.**—*D. denticeps* Stål, *decemguttata* Stål see *Eustilodes.*

Doryphorella consanguinea Honduras, *obidosensis* Brazil p. 13, *simillima* Fr. Guiana p. 14 **spp. n.** (*Histrionella* **subgen. n.** p. 45), key, *histrio* **varr. n.** *rufula, deficiens* p. 46, *macularis, scurra* **var. n.** *limbatella, disparilis* **sp. n.**, *congener* **var. n.** *fuscitarsis* p. 47 Brazil, *javeti* **var. n.** *pluriplagata* Ecuador, *imperialis* **var. n.** *regalis* Fr. Guiana, *testudo* **var. n.** *juncta* Colombia, *fasciata* **var. n.** *grayi* Venezuela p. 120, *aurantiacomaculata* **varr. n.** *hastata* Brazil, *semijuncta* Montevideo, *fulvicornis* **var. n.** *dislocata* Peru p. 121, *angulata* **varr. n.** *bicincta, abbreviata, bifasciata* **varr. n.** *mediorupta, distincta, inapicalis, semifasciata* p. 122 Dutch Guiana, *undulata* **var. n.** *ibaguensis* Colombia, *tessellata* **var. n.** *disrupta* Brazil, *tesseraria* **varr. n.** *cribraria, inornata* Argentina, *saucia* **var. n.** *immaculithorax* Brazil p. 123, *batesi* **var. n.** *basilea* Peru, *princeps* **varr. n.** *immaculiceps, fulvithorax, fulgida* p. 124, *magnifica* **abb. n.** *collaris, opthalmica, semilimbata, seminormalis, obliterata, nigrithorax* (no locality), *diagonalis* **var. n.** *ramulifera* Mexico, ACHARD Fragm. ent. **1922** & **1923.**—*D. chlorosoma* Colombia p. 134, *cinctella* ? Brazil p. 135 **spp. n.**, ACHARD Bull. Soc. ent. Fr. **1924.**

Dorysterna subfestiva **sp. n.** Brazil p. 15, *eugenia* **var. n.** *spilota* Peru, *dorsosignata* **var. n.** *sexpunctata* Brazil p. 125, ACHARD Fragm. ent. **1922** & **1923.**

Elytrosphaera (*Elytromena*) *variegata* **sp. n.** America merid. p. 92, ACHARD op. cit. **1923.**

Eugonycha tuberculata **sp. n.** Brazil p. 91, ACHARD op. cit. **1923.**

Eustilodes **gen. n.** for *Deuterocampta denticeps* Stål, *decemguttata* Stål, *cordata* **sp. n.** Brazil p. 88, ACHARD op. cit. **1923.**

Gavirga unicolor p. 25, *germaini* (with **var. n.** *conjuncta*) p. 26, **spp. n.** Bolivia, ACHARD op. cit. **1922.**

Grammodesma **gen. n.** for various species of *Desmogramma* (type *westringi* Stål) p. 71, ACHARD op. cit. **1923.**

Grammomades **gen. n.** for *Desmogramma redtenbacheri* Stål etc. p. 72, ACHARD op. cit. **1923.**

Histrionella **subgen. n.** see *Doryphorella.*

Labidomera paulistana **sp. n.** Brazil p. 66, ACHARD Fragm. ent. **1923.**

Leptinotarsa virgulata p. 67, *boucardi* p. 68, **spp. n.** Mexico, ACHARD op. cit. **1923.**—*L. decemlineata,* lymph coloration &c. pp. 443–449, PALMER & KNIGHT J. Biol. Chem. **59.**

Leucocera semicaerulea **sp. n.** Cuba p. 90, ACHARD Fragm. ent. **1923.**

Linographa muricata Chevr. further description with **var. n.** *auroplagata* Brazil p. 90, ACHARD op. cit. **1923.**

Lioplacis paupera **var. n.** *missionea* Argentina p. 125, ACHARD op. cit. **1923.**

Mesoplatys crampeli **sp. n.** Fr. Congo p. 19, ACHARD op. cit. **1922.**

Metastyla insignis **sp. n.** Brazil p. 67, ACHARD op. cit. **1923.**

Monocampta crucifera, Dej. synonymy and further description p. 89, ACHARD op. cit. **1923.**

Pandona orbicularis **sp. n.** Brasil p. 20, ACHARD op. cit. **1922.**

Paropsis ponderosa p. 524, *bivulnerata* p. 525, *nigrosuturalis* p. 526, *subaeraria, s-notata* p. 527, *novemlineata* p. 528, *trimorpha* p. 529, *haematosticta, isolata* p. 531, *medioflava, cardinalis* p. 532, *didyma* p. 533, *immaculicollis, calomeloides* p. 534, *seminigripes* p. 535, *nigrolineata, flavoinclusa* p. 537, *prosternalis* p. 538, *erythrocephala, mediorufa* p. 539, *macrosticta, caloptera* p. 540, *ziczac* p. 541, *platynota* p. 542, *platycephala* p. 543, *maculiventris* p. 544, **spp. n.** Australia figs., LEA Rec. S. Aust. Mus. **2.**

Phytodecta linnaeanus **var. n.** *bohemicus* Czecho-Slovakia p. 31; *viminalis* **varr. n.** *monostigma, distigma, interversus* p. 31; *viminalis denominandus* **n. n.** for *collaris* Weise 1887 (nec Gradl. 1882); *affinis* **varr. n.** *hamatus, decaspilotus* Norway; *flavicornis* **var. n.** *limbatipennis* Germany p. 32, *nivosus* **var. n.** *immarginatus, rubripennis* **var. n.** *plagipennis* Japan, *fortunei* **var. n.** *extensus*; *semiglobosus* **sp. n.** China p. 33; *13-maculatus* **var. n.** *cinctipennis* Tonkin p. 33, *taiwanensis* Formosa p. 34; *eburoides* **sp. n.** Annam, China; (*Spartophila*) *olivaceus* **varr. n.** *bipartitus* France p. 34, *escurialensis* Madrid; (*Goniomena*) *pallidus* **var. n.** *nigritinctus* Silesia p. 35, (*Spartoxena*) *variabilis rubromarginatus* **n. n.** for *marginatus* Reineck (nec Gradl.) p. 36, ACHARD Casopis **21.**—*P. americana* p. 139, *notmani* **spp. n.**, key to N. American spp. p. 140, SCHAEFFER J. N. Y. Ent. Soc. **32.**

Planagetes signata Brazil, *variabilis* Argentina p. 22, *jatahyensis* Brazil, *plagata* p. 23 (with **var. n.** *girardi*) Argentina, *plagipennis* (with **var. n.** *luteipes*), *apicata* Brazil p. 24, *vittata* Argentina p. 25, **spp. n.**, ACHARD Fragm. ent. **1922.**

Polyspila similis **varr. n.** *intermedia, hilaris* Texas; *lunata* **varr. n.** *mediorupta, latevittata* Massachusetts; *serpentina* **var. n.** *discrepans* Mexico p. 69; *sallei* **sp. n.** Venezuela; *polyspila* **varr. n.** *plagata*, Argentina, *bilineolata* Brazil p. 120; *multiplagata* **sp. n.** Argentina p. 70, *percheroni* **var. n.** *petiti* Peru p. 71, ACHARD op. cit. **1923.**

Stilodes reticulata p. 78, *ornatipennis* p. 79 Brazil, *quadrivirgulata* Bolivia, *flavivittis* Paraguay p. 80, *plagipennis* Bolivia p. 81, *erythrocephala* Ecuador p. 82, *variipennis* Honduras p. 83, *lineolata* Bolivia p. 84, *spiloptera* p. 85, *variegata* Tumbala, *maronica* Fr. Guiana p. 86 **spp. n.**, *nigricollis* **var. n.** *ruficollis* Mexico, *decaspila* **var. n.** *flavapex* Fr. Guiana p. 87, ACHARD op. cit. **1923.**

Timarchomela **gen. n.** *aeneolucens* p. 17 (with **var. n.** *melanaspis*), *costulata* p. 18, **spp. n.** Indo-China, ACHARD op. cit. **1922.**

Zygogramma key p. 52, *loratella* p. 54, *jatahyensis* **spp. n.**, *flavotaeniata* **var. n.** *inconjuncta* p. 55, *appendiculata* **var. n.** *integra, formosa* p. 56 Brazil, *egregia* Peru p. 57, *punctatella* Colombia p. 58, *gounellei* Brazil p. 59, *marginicollis* Argentine p. 60, *izozensis* Bolivia, *bogotensis* Colombia p. 61 **spp. n.**, *deleta* **var. n.** *sagittata* Brazil p. 62, ACHARD op. cit. **1923.**

Zygospila **gen. n.** p. 53, *arcuigera* **sp. n.** p. 65 (with **varr. n.** *trilineolata*, Costa Rica, *chiriquina* Panama p. 66), ACHARD op. cit. **1923.**—*Z. elegantula* **sp. n.** Guatemala p. 133, ACHARD Bull. Soc. ent. Fr. **1924.**

HALTICIDAE.

Keys to palaearctic genera of Halticinae, HEIKERTINGER Koleopt. Rdsch. **11** pp. 25–48 figs.

Food-plants of Central European Halticinae, HEIKERTINGER Ent. Bl. **20** pp. 214–224.

Aphthona sordida see *Trachyaphthona.*

Aphthonaltica **gen. n.** for *Haltica angustata* p. 39, HEIKERTINGER Koleopt. Rdsch. **11.**

Blepharida semisulcata Fr. Guiana p. 7, *alticola* Mexico, *favareli* p. 8, *plagipennis* p. 9 Fr. Congo, **spp. n.**, ACHARD Fragm. ent. **1922.**

Chaetocnema protensa **var. n.** *splendida* N. America p. 165, GENTNER Ent. News **35.**

Chirodica bicolor **sp. n.** S. Africa p. 303, BRYANT Ann. Mag. N. H. (9) **13.**

Cladocera see *Polyclada.*

Cladotelia see *Polyclada.*

Crepidodera birungana **sp. n.** C. Africa p. 25, WEISE Ark. Zool. **16** no. 22.

Crimissa obesa **sp. n.** Fr. Guiana p. 1, ACHARD Fragm. ent. **1922.**

Diamphidia curtula p. 5, *lesnei* p. 6 Mozambique, *semiopaca* Zanzibar p. 7, **spp. n.**, ACHARD op. cit. **1922.**

Dibolia marrubii p. 36, *menthae* p. 37, **spp. n.** Hungary, HERING Zs. wiss. Insektenbiol. **19.**

Disonycha albida **sp. n.** Florida p. 169, BLATCHLEY Can. Ent. **56.**—*D. admirabila* **sp. n.** Indiana p. 90, BLATCHLEY J. N. Y. Ent. Soc. **32.**—*D. davisi, asteris* **spp. n.** N. America p. 141, SCHAEFFER J. N. Y. Ent. Soc. **32.**—*D. gowdeyi* **sp. n.** Jamaica p. 250, BRYANT Ann. Mag. N. H. (9) **14.**

Elithia dubitabilis **sp. n.** Brazil p. 1, Achard Fragm. ent. **1922.**

Embolimus iturianus **sp. n.** C. Africa p. 24, Weise Ark. Zool. **16** no. 22.

Escaleriella gyldenstolpei **sp. n.** C. Africa p. 25, Weise t.c.

Glyptina ferruginea p. 91, *leptosoma* p. 92, **spp. n.** Indiana, Blatchley J. N. Y. Ent. Soc. **32.**—*G. abbreviata* **sp. n.** U.S.A. p. 167, Gentner Ent. News **35.**

Guilielmia **gen. n.** (near *Aphthona*) p. 23, *monticola* **sp. n.** C. Africa p. 24, Weise Ark. Zool. **16** no. 22.

Haltica betulae p. 142, *liebecki* p. 144 **spp. n.**, *evicta* **var. n.** *shoemakeri* p. 145 N. America, *cuprascens* Blatchley synonymy p. 144, Schaeffer J. N. Y. Ent. Soc. **32.**—*H. nitens* **sp. n.** C. Africa p. 21, Weise Ark. Zool. **16** no. 22.—*H. angustata* see *Aphthonaltica, obscura* see *Zipangia.*

Hermaeophaga cubana **sp. n.** Porto Rico p. 302, Bryant Ann. Mag. N. H. (9) **13.**

Hespera fulvicollis **sp. n.** C. Africa p. 23, Weise Ark. Zool. **16** no. 22.

Lipromima **gen. n.** for *Liprus minutus* p. 41, Heikertinger Koleopt. Rdsch. **11.**

Liprus minutus see *Lipromima.*

Longitarsus pallescens Ontario p. 90, *acutipennis* Indiana p. 91 **spp. n.**, Blatchley J. N. Y. Ent. Soc. **32.**—*L. cyanipennis* **sp. n.** India p. 249, Bryant Ann. Mag. N. H. (9) **14.**

Phyllotreta capicola **sp. n.** S. Africa p. 249, Bryant Ann. Mag. N. H. (9) **14.**—*P. conjuncta* **sp. n.** U.S.A. p. 168 fig., Gentner Ent. News **35.**

Polyclada Er. 1841 (= *Cladocera* Hope 1840, *Cladotelia* Kolbe 1894), *soriacea* E. Africa, *bedeli* Fr. Somaliland **spp. n.** p. 4, Achard Fragm. ent. **1922.**

Sebaethe solita, silvarum, nigriceps **spp. n.** C. Africa p. 22, Weise Ark. Zool. **16** no. 22.

Tlanoma barkeri **ab. n.** *flavipes* C. Africa p. 26, Weise t.c.

Trachyaphthona **gen. n.** for *Aphthona sordida* p. 34, Heikertinger Koleopt. Rdsch. **11.**

Zipangia **gen. n.** for *Haltica obscura* p. 39, Heikertinger t.c.

Galerucidae.

Asbecesta ituriensis p. 17, *gyldenstolpei* p. 18, **spp. n.** C. Africa, Weise Ark. Zool. **16** no. 22.

Aulacophora, key to Australian spp., *tetrastictoptera* p. 50, *medioflava* p. 51, *apiciventris* p. 52, **spp. n.** Australia, Lea Mem. Queensland Mus. **8.**

Aulamorphus variabilis **abb. n.** *thoracicus, apicalis* C. Africa p. 17, Weise Ark. Zool. **16** no. 22.

Bacteriaspis pygmaeus sp. n. Congo p. 144, Laboissière Rev. zool. afr. **12.**

Beiratia coerulea **sp. n.** B. E. Afr. p. 26, Laboissière Voy. Babault Afr. or. angl. **1924.**

Buphonida submetallica **sp. n.** C. Africa p. 13, Weise Ark. Zool. **16** no. 22.

Diabrotica jamaicensis **sp. n.** Jamaica p. 251, Bryant Ann. Mag. N. H. (9) **14.**

Diacantha laciniata **sp. n.** C. Africa p. 15, Weise Ark. Zool. **16** no. 22.

Galerucella wolcotti **sp. n.** Porto Rico p. 252, Bryant Ann. Mag. N. H. (9) **14.**—*G.*, key to New England spp. p. 82, *kalmiae* p. 87, *vaccinii* p. 88, *alni* p. 89, *perplexa* p. 90, **spp. n.** New England, Fall Maine Agric. Expt. Sta. Bull. **319.**

Hyperacantha duplicata **var. n.** *tinantae* Congo p. 154, *cupripennis* **n. n.** for *verticalis* Frm. p. 155, *velensis* **sp. n.** Congo p. 157; *insignipennis* **varr. n.** *picicollis* p. 159, *christyi* p. 162 Congo; *varians* **varr. n.** *ornata* Nyasaland, *gowdeyi* Uganda; *pallidula* Mashonaland p. 161, *imitans* Nyasaland p. 162, *carinata* Congo p. 163 **spp. n.**, *seminigra* **var. n.** *decolorata* E. Africa, *bifrons* Kenya, *marshalli* Mashonaland **spp. n.** p. 164, *kraatzi* **varr. n.** *fenestrinae* p. 165, *vandenblasi* p. 166, *clavareui* **var. n.** *lunata* p. 167, *humilis* **var. n.** *ephippiata* p. 168, *burgeoni* p. 169 (with **var. n.** *basalis*), *cincta, fulva* p. 170, *bifasciata* (with **varr. n.** *ituriensis, quadriplagiata*), *dimidiata* p. 171, **spp. n.**, *flavonigra* **var. n.** *humeralis* p. 284, *flavodorsata* **ab. n.** *obliterata* and **var. n.** *bicincta* p. 286, *vicina* **sp. n.** (with **var. n.** *alluaudi*) p. 287, *hypomelaena* **var. n.** *terminata* p. 290, *deusseni* **var. n.** *immaculata, colmanti* p. 291, *elegans* p. 292, *hybrida* p. 293 (with **var. n.** *rodhaini*), *complexa* p. 294 (with **varr. n.** *portalis, unicolora, semifulva*), *equatorialis* p. 295, *sternalis, dubia* p. 298

(with **var. n.** *maynéi* p. 299), *bifurcata* (with **var. n.** *nigrolutea*) p. 300, **spp. n.**, *sinuosa* **varr. n.** *aequimoda*, *postrema* p. 302, *similis* **sp. n.** (with **varr. n.** *livida* p. 303, *transversofasciata* p. 304); *stuhlmanni* **varr. n.** *lujai*, *mixta* p. 305, *tibialis* p. 306; *beniensis* **sp. n.** p. 306 (with **var. n.** *tricolora* p.308), Congo figs., LABOISSIÈRE Rev. zool. afr. **12.**

Idacantha dregei Chapuis (= *capensis* Weise) p. 6, LABOISSIÈRE Voy. Babault Afr. or. angl. **1924.**

Jacobya abdominalis, *elegantula*, *texaspilota*, *modesta* see *Jacobyanella.*

Jacobyanella **gen. n.** (near *Jacobya*) p. 145, *femorata*, *quadriplagiata* **spp. n.** Madagascar p. 146 figs., LABOISSIÈRE Rev. zool. afr. **12.**

Leptaulaca magna **sp. n.** C. Africa p. 12, WEISE Ark. Zool. **16** no. 22.

Luperodes deprimozi p. 17, *scutobliquus* p. 19 **spp. n.** B. E. Afr. fig., LABOISSIÈRE Voy. Babault Afr. or. angl. **1924.**

Luperus (*Calomicrus*) *karissimbicus* **sp. n.** C. Africa p. 16, WEISE Ark. Zool. **16** no. 22.

Monolepta apicalis **var. n.** *tanensis* B. E. Afr. p. 29, LABOISSIÈRE Voy. Babault Afr. or. angl. **1924.**—*M. kivuensis*, *sudanica* p. 19, *vilis*, *gyldenstolpei* p. 20, **spp. n.** C. Africa, WEISE Ark. Zool. **16** no. 22.

Oidomorpha **gen. n.** (near *Oides*) p. 11, *africana* **sp. n.** Kenya p. 12 fig., LABOISSIÈRE Bull. Soc. ent. Fr. **1924.**

Ornithognathus aenipennis p. 137, *caeruleipennis*, *similis* p. 139 (with **varr. n.** *virescens*, *hutereauae*), *fossicollis* p. 141, **spp. n.** W. Africa figs., LABOISSIÈRE Rev. zool. afr. **12.**

Pachytomella bimaculata **sp. n.** Nyasaland p. 13, LABOISSIÈRE Bull. Soc. ent. Fr. **1924.**

Phyllobrotica adusta **subsp. n.** *litoralis* Dalmatia p. 78, MÜLLER Boll. Soc. ent. ital. **56.**

Phyllobrotica, key, *ferruginea* p. 311, *pallida* p. 312, *maynéi* p. 313, *nigripennis* p. 314, **spp. n.** Congo, LABOISSIÈRE Rev. zool. afr. **12.**

Prosmidia vicina **ab. n.** *initialis* p. 10, *passeti* **ab. n.** *vittulina* p. 11 C. Africa, WEISE Ark. Zool. **16** no. 22.

HISPIDAE.

Agonia multimaculata p. 5, *coomani*, p. 6, **spp. n.** Tonkin, PIC Mél. exot. ent. **41.**—*A. serena* **sp. n.** Sumatra p. 81, WEISE Tijd. Ent. **67.**

Anisodera foveolata Laos, *brevipennis* Tonkin, *brevelineata* Malacca **spp. n.** p. 29, PIC Mél. exot. ent. **42.**

Bronthispa sumatrana **sp. n.** Sumatra p. 78, WEISE Tijd. Ent. **67.**

Callispa latipennis Sikkim, *donckieri*, *apicalis* China p. 99, *flavonotata* Sumatra p. 100, **spp. n.**, PIC Bull. Soc. ent. Fr. **1924.**—*C. dimidiatipennis* **var. n.** *latior* Tonkin; *bouringi* **var. n.** *atripes*: *cyanipennis* China, *testaceipes* Burma **spp. n.** p. 27, PIC Mél. exot. ent. **42.**—*C. mungphua*, Maulik (= *latipennis*, Pic) p. 217, MAULIK Bull. Soc. ent. Fr. **1924.**

Cephalolia elaeidis **sp. n.** Brazil p. 245, MAULIK Bull. Ent. Res. **14.**

Cryptonychus apicalis **sp. n.** French Congo p. 100, PIC Bull. Soc. ent. Fr. **1924.**—*C. rufipes* p. 27, *annulipes* **spp. n.** Kamerun, *bipunctatus* **var. n.** *subnotatus* Congo p. 28, PIC Mél. exot. ent. **42.**

Downesia maculaticeps Sumatra, *strigosa*, *nigritarsis* p. 4, *latenigra* (with **var. n.** *basipennis*), *tonkinea* Tonkin, *anceyi* Saïgon, *sumatrana* **var. n.** *reducta* Sumatra p. 5, PIC Mél. exot. ent. **41.**—*D. donckieri* **sp. n.** Tonkin p. 99, PIC Bull. Soc. ent. Fr. **1924.**

Estigmena chinensis **varr. n.** *atricollis* China, India, *nigripennis* Laos p. 29, *ruficollis* Sumatra p. 30, PIC Mél. exot. ent. **42.**

Gonophora nigrimembris **sp. n.** Sumatra p. 82, WEISE Tijd. Ent. **67.**—*G. dentatithorax* **sp. n.** Tonkin p. 4, PIC Mél. exot. ent. **41.**

Hispella donckieri **sp. n.** Tonkin p. 28, PIC Mél. exot. ent. **42.**

Javeta corporaali **sp. n.** Sumatra p. 80, WEISE Tijd. Ent. **67.**

Lepthispa longissima **sp. n.** Tonkin p. 3, PIC Mél. exot. ent. **41.**

Lissochila [printed *Lasiochila*] *rufipennis*, *subparallela* p. 30, *rufipes* p. 31 Tonkin, *bicolor*, *formosana* p. 30 Formosa **spp. n.**, *gestroi* **var. n.**, *ruficolor* Tonkin p. 31, PIC op. cit. **42.**

Oxycephala coquereli **var. n.** *multivittata* Madagascar p. 100, PIC Bull. Soc. ent. Fr. **1924.**

Platypria fenestrata **sp. n.** Tonkin p. 100, Pic Bull. Soc. ent. Fr. **1924.**

Pleurispa tuberculata **sp. n.** Ivory Coast p. 28, Pic Mél. exot. ent. **42.**

Promecotheca superba **sp. n.** Australia p. 3, Pic op. cit. **41.**

Cassididae.

Acrocassis **gen. n.** for *Cassida gibbipennis* Boh. p. 312, key p. 313, Spaeth Voy. Alluaud & Jeannel Afr. or. xviii Cassidinae **1924.**

Aethiopocassis **subgen. n.** see *Cassida.*

Andevocassis **gen. n.** for *Cassida nigropunctata* Fairm. p. 310, Spaeth t.c.

Aspidomorpha key p. 294, *obtectans* p. 287, *alluaudi* p. 292, *gausapina* p. 294 **spp. n.**, *angolensis* **ab. n.** *propitia* p. 280, *togata* **abb. n.** *camerunensis, praevisa, ruwensorica* **abb. n.** *pinguis* p. 286, *segregata* p. 284 (table), E., W. & S. Africa, Spaeth t.c.

Bassamia **gen. n.** for *Cassida paeminosa* Boh. p. 312, Spaeth t.c.

Cassida jeanneli p. 335, *procurva* p. 354, *impompalis* p. 356, *successiva* p. 357, *imbellis* p. 358, *insignis* p. 359, *comtula* p. 361 **spp. n.**, (*Aethiopocassis* **subgen. n.**) key p. 319, *alluaudi* p. 315, *burensis* p. 317, *flaccida* p. 323, *scita* p. 324, *sensualis, rhodesiana* p. 327, *imbuta* p. 331 **spp. n.**, *suahelorum* **ab. n.** *nigrosuturata* p. 323 E.W. & S. Africa, Spaeth t.c.—*C. nigropunctata* Fairm. see *Andevocassis ; corpulenta* Weise ; *exsanguis* Fairm. see *Tegocassis ; conducta* see *Trigonaspis ; paeminosa* Boh. see *Bassamia ; gibbipennis* Boh. see *Acrocassis ; setifera* Boh. see *Smeringaspis.*

Chirida gyldenstolpei **sp. n.** C. Africa p. 27, Weise Ark. Zool. **16** no. 22.—*C. aubei* Boh. see *Chiridopsis.*

Chiridopsis **gen. n.** for *Chirida aubei* Boh. p. 337, key p. 342, *athinia* p. 338, *melanocephala* p. 343, *regionalis* p. 344, *elongata* p. 345, *signaticollis* p. 346, *maculipennis* p. 347, **spp. n.**, *baumanni* **subsp. n.** *nigriceps* p. 343, *weisei* **n.n.** for *semivittata* Weise (nec Boh.) p. 349 E. W. & S. Africa, Spaeth Voy. Alluaud et Jeannel Afrique or. xviii Cassidinae **1924.**

Conchyloctenia key p. 299, *bonnyana* **subsp. n.** *simulans* W. Africa p. 303, Spaeth t.c.

Erbolaspis **gen. n.** for *Hypocassida passaria* Ws. p. 312, Spaeth t.c.

Hoplionota lumbwa **sp. n.** Kenya p. 353, Spaeth t.c.

Hypocassida passaria Ws. see *Erbolaspis.*

Laccoptera famula p. 305, *salebra* p. 306, **spp. n.** E. Africa, Spaeth t.c.

Smeringaspis **gen. n.** for *Cassida setifera* Boh. p. 312, Spaeth t.c.

Tegocassis **gen. n.** for *Cassida corpulenta* Ws. & *C. exsanguis* Frm. p. 310, Spaeth t.c.

Trigonaspis **gen. n.** for *Cassida conducta* Boh. p. 311, Spaeth t.c.

Stylopidae.

Acroschismus wheeleri reproduction, life history p. 157 figs., Schrader J. Morph. **39.**

Stylops, mating pp. 128–134 fig., Hofeneder Verh. zool. bot. Ges. Wien **73.**—*S.*, notes on, p. 151, Perkins Ent. Mo. Mag. **60.**

LEPIDOPTERA.

Catalogue of Lepidoptera of Hungary, ABAFI-AIGNER, PÁVEL UHRYK Fauna Regni Hung. Lepidoptera 1918 pp. 5–82.

Synonymic and other notes, distribution of Lepidoptera of Egypt, ANDRES & SEITZ Senckenbergiana **6** p. 70.

Notes on embryology in Lepidoptera, BOTT Intern. ent. Zs. **18** p. 161.

Notes on some Lepidoptera of Alpes-maritimes and Basses-Alpes pp. 311–322, BOURSIN Ann. Soc. ent. Fr. **92**.

Lepidoptera of the Central Rhodope Mountains, Bulgaria, DRENOVSKI Zs. wiss. Insektenbiol. **19** pp. 233–238.

The Macrolepidoptera of Hampshire & Isle of Wight, FASSNIDGE Ent. Rec. **36** sep. pp. 17–40.

Lepidoptera of New York and neighbouring States. Primitive forms, Microlepidoptera, Pyraloides, Bombyces, with many keys, FORBES Cornell Univ. Agric. Expt. Sta. Mem. **68** 1923 729 pp. figs.

Corrections and supplements to Finnish species in W. Petersen's "Lepidopteren-Fauna von Estland," GRÖNBLOM & CLAYHILLS Not. ent. **4** pp. 99–103.

Colour development in Lepidoptera, HASEBROEK Intern. ent. Zs. **18** p. 182 figs.

Microlepidoptera in Upper Austria, HAUDER Jahresber. Oberöst. Musealver. **80** p. 267.

Notes on the Macrolepidoptera of Bavaria, HEINRICH D. ent. Zs. **1924** p. 361.

The construction of butterfly scales, HEINZEL Intern. ent. Zs. **18** 1924 pp. 5–7, 14–16.

The Macrolepidoptera of N. Tirol, HELLWEGER Jahresb. des Vicentiums Brixen 1914 pp. 1–364.

Lepidoptera of Tyrrhenian islands, HOLDHAUS Ann. Nat.-hist. Mus. Wien **37** pp. 155–160.

List and synonymy of Lepidoptera of Hainan, JOICEY & TALBOT Bull. Hill Mus. **1** p. 514.

Lepidoptera from Kielce-Sandomierz, Poland, NIESIOLOWSKI & PRUFFER Polsk. Pismo ent. **2** pp. 159–171.

Artificial colouration of Lepidoptera, PERMENTIER Rev. mens. Soc. ent. Namur **28** pp. 69–71.

Heredity in Lepidoptera, PICTET Mit. schweiz. ent. Ges. **13** pp. 358–359.

Mimicry in Fijian Lepidoptera, POULTON Trans. Ent. Soc. **1923** 1924 p. 564.

The origin of Lepidoptera, PRACK Intern. ent. Zs. **18** p. 87.

The senses of Lepidoptera, SEITZ Ent. Rdsch. **41** p. 39.

Notes on Lepidoptera from Lower Italy, STAUDER Soc. ent. **39** p. 3.

Technique of collecting Lepidoptera with biological notes, STAUDER Ent. Anz. **4** p. 1.

Notes on cocoon-making moths of the district of Glatz (Silesia), STEPHAN D. ent Zs. Iris **38** pp. 186–219.

Swiss Lepidopterological records 1818–1923, VORBRODT Schweizer ent. Anz. **3** pp. 4–7, 11–13, 17–20.

Lepidoptera of the Tössstockschon region, Switzerland, WEBER Schweizer ent. Anz. **3** pp. 29–30.

Notes on Japanese Lepidoptera and their larvae, part vii figs., WILEMAN Phil. J. Sci. **25** pp. 75–109.

Rhopalocera.

Biological notes and descriptions of Indian butterflies, BELL J. Bombay N. H. Soc. **29** pp. 921–946; **30** pp. 132–150.

"Disphragophory" in female butterflies, BRYK Soc. ent. **39** p. 45.

Notes on butterflies of Austria & Hungary, COOKE Entomologist **57** pp. 74, 133.

Natural history of British Butterflies figs., FROHAWK **1** pp. 1–207; **2** pp. 1–205.

Butterflies with two generations a year in Finland, GRÖNBLOM Not. ent. **4** pp. 103–106.

Notes on butterflies in Spain, GURNEY Entomologist London **57** pp. 103, 124, 155.

Colour of butterflies wings in flight, KAYE Trans. Ent. Soc. London **1923** 1923 pp. xxxvii–xliii.

Winter butterflies in S. Europe, MARTEN Ent. Rdsch. **41** p. 17.

Critical notes on butterflies from Celebes, MARTIN Tijd. Ent. **67** pp. 32–116.

List of butterflies in Regensburg district, notes & synonymy, METSCHL Ber. natw. Ver. Regensburg **16** pp. 1–99.

Colour pattern of wings in Rhopalocera, SCHWANWITSCH Proc. Zool. Soc. **1924** p. 509 figs.

Structure of butterfly scales, STÜFFERT Zs. Morph. Oekol. **1** p. 171 figs.

Synonymic and other notes on Italian Rhopalocera, VERITY & QUERCI Ent. Rec. **36** sep. p. 21–44.

PAPILIONIDAE.

Parasites, life history and food plants of Papilionidae of Parchim, GILLMER Arch. Ver. Natg. Güstrow **75** 1922 p. 36.

Papilio zelicaon food-plants p. 44, COOLIDGE Bull. Brooklyn Ent. Soc. **19.**—*P. machaon* notes p. 169, CRETSCHMAR Intern. ent. Zs. **17.**—*P. machaon saharae* **f. n.** *xanthosoma* Tripoli p. 27 fig., TURATI Atti Soc. ital. Sci. nat. **63.**—*P. philoxenus* **var. n.** *roseus* p. 55, *confusus* **varr. n.** *parummaculatus, nana* p. 56, *bianor* **var. n.** *superans* p. 58 W. China, DRAESEKE Iris **37.**—*P. dolicaon deileon, dardanus,* larvae described pp. 25 & 28, FERREIRA D'ALMEIDA Ann. Soc. ent. Fr. **93.**—*P. prattorum* **f. n.** *mixtum* Buru p. 508, *ulysses ampelius* ♀ described p. 512, *helena oblongomaculatus* **ab. n.** *sordidus, polydorus* **subspp. n.** *schoutensis* p. 565, *wangaarensis* p. 566, Dutch E. Indies, *aglaope* **subsp. n.** *ecaudatus, erlaces lacydes* **f. n.** *parvifasica* S. America p. 570, JOICEY & TALBOT Bull. Hill Mus. **1.**—*P. leonidas* **subsp. n.** *thomasius* p. 137, *leonidas leonidas* **f. n.** *plagifera* p. 138 S. Africa, LE CERF Bull. Mus. Hist. nat. Paris **1924.**—*P.* notes on African spp. in Hill Museum, *antimachus* **ff. n.** *centrispila, melanescens* p. 372; *rex* **subsp. n.** *barnsi* p. 373; *dardanus* **ff. n.** *ceneispila* p. 374, *acenides* p. 375; *dardanus cenea* **ff. n.** *natalica, hypolimnides* p. 377, *extensiflava* p. 378 Africa; *dardanus meriones* **f. n.** *palaeotypus* p. 379 Madagascar; *phorcas* **ff. n.** *mutans* p. 380, *media; euphranor* **subsp. n.** *mortus* p. 381; *pelodurus* **f. n.** *lyrus, extensus* p. 382, **subsp. n.** *vesper* **f. n.** *excedens* p. 383; *hesperus* **f. n.** *insolitus* p. 384; *charopus* **subsp. n.** *juventus; nireus* **f. n.** *dimidiatus* p. 385 Africa; *epiphorbas* **ff. n.** *hova, oriphorbas* p. 386 Madagascar; *constantinus* **subsp. n.** *monticolus* p. 387, *menestheus-lormieri* **subsp. n.** *semlikana* Africa; *grose-smithi* **f. n.** *praeses* p. 388 Madagascar; *cypraeofila* **f. n.** *lactifascia* p. 390; *cynorta* **ff. n.** *lavochrea* p. 391, *ochrospila* p. 392; *jacksoni* **subsp. n.** *ruandana* p. 393; *ridleyanus* **ff. n.** *vitrea, rosa* p. 394; *hachei-möbii* **subsp. n.** *camerunicus* p. 395; *leonidas* subsp. *brasidas* **f. n.** *melusina* p. 397; *policenes* **subsp. n.** *laurentia* p. 398; *illyris* **f. n.** *stictica* p. 399 Africa figs., LE CERF Bull. Hill Mus. **1**—*P. podalirius* **f. n.** *pseudozancleus* Regensburg p. 10, METSCHL Ber. natw. Ver. Regensburg **16.**—*P. maroni* ♂ described p. 93, MOREAU Bull. Soc. ent. Fr. **1924.**—*P. bianor* **subsp. n.** *paradoxa* Saghalien p. 38, NAKAHARA Bull. Brooklyn Ent. Soc. **19.**—*P. androgeos* **f. n.** *feyeri* Ecuador, *laodamas laodamas* Fld. female described, Columbia, *ambrax* **f. n.** *ambitiosa* New Guinea p. 49, *heringi* **sp. n.** Halmaheira p. 69, NIEPELT Intern. ent. Zs. **18.**—*P. dardanus* **ab. n.** *crocotus* Ivory Coast p. xlvii, POULTON Trans. Ent. Soc. **1923** —*P. dardanus cenea* **f. n.** ♀ *ochracea* B. E. A. p. xxvii, POULTON Trans. Ent. Soc. **1924.**—*P. dardanus* mimicry p. 4 figs., POULTON J. E. Afr. Ugan. N. H. Soc. no. **20.**—*P. xuthus* **abb. n.** *decolorata, pseudozancleus, depuncta, rubromaculata* China and Japan p. 133; *machaon* **abb. n.** *rubroanalis, cyanatus, nigrociliata, bella, comma, tristis, tenuimarginata, demaculata* Central Europe; *podalirius* **abb. n.** *caecus* Syria, *coretas, decolorata, flavolineata* p. 134, *semistrigata* p. 135 Oberlausitz, STÄTTERMAYER Ent. Anz. **4.**—*P. xuthus* **f. n.** *unimaculata* E. Asia p. 149, WARNECKE Iris **38.**—*P. podalirius* **f. n.** *ornatissima* Rhone valley, p. 157, WARNECKE Intern. ent.

Zs. **18.**—*P.*, larvae, Palaearctic, pp. 239–240 figs., SEITZ Senckenbergiana **5** 1923.—*P.*, larvae, Asia & Africa p. 239 figs., SEITZ Senkenb. **6.**

Parnassius apollo **abb. n.** *antecubitalis, turatii* p. 11, *rubricollis* p. 34, *pseudofemina* p. 35, *perfectus* p. 40, *basireducta* p. 108 Germany, FAGNOUL Mitt. Bad. ent. Ver. **1** 1923 & 1924.—*P. apollo* **subspp. n.** *debilis* Savoy p. 17, *caloriferus* Laquintal p. 20, *mnemosyne* **subspp. n.** *lysandra* p. 77, *irena* p. 78 Bavaria, *apollo* **subspp. n.** *montebaldensis* Monte Baldo p. 142, *rosenius* Bukovina p. 143, FRUHSTORFER Ent. Anz. **4.**—*P. apollo* **ab. n.** *rhodopensis* Bulgaria p. 82, MARKOVITCH Trav. Soc. bulg. Sci. nat. **4** 1910.—*P. apollo*, nomenclature & synonymy, pp. 37 & 42; notes on Caucasian races p. 42, SHELJUZHKO Mitt. Munchn. ent. Ges. **14.**—*P. apollo*, numerous **abb. n.** Tyrol p. 14, STAUDER D. ent. Zs. **1924.**—*P. apollo* **f. n.** *tetradynomos* Alps p. 9, STAUDER Intern. ent. Zs. **18.**—*P. apollo* **ab. n.** *albofimbriata* Trans-caucasia p. 76, STAUDER Iris **37.**—*P. apollo* **ab. n.** *pantographomena* Europe p. 34, STAUDER Ent. Anz. **4.**—*P. apollo* **ab. n.** *novarae* Germany p. 15 fig., WITTSTADT Soc. ent. **39.**—*P. mnemosyne*, reproductive organs pp. 1–3, 9–11, food plant pp. 33–35, RIS Schweizer ent. Anz. **3.**—*P. mnemosyne* **subsp. n.** *korbi* Bryk (= subsp. *irena* Fruhst.) p. 114, WARNECKE Ent. Anz. **4.**—*P. delphius* numerous **ff. n.** Turkestan pp. 59–60, STAUDER Mitt. Munch. ent. Ges. **14.**

PIERIDAE.

Parasites, life-history and food-plants of Pieridae of Parchim, GILLMER Arch. Ver. Natg. Güstrow **75** 1922 p. 38.

Uric acid in pigmentation of wings of Pieridae, WIGGLESWORTH Proc. R. Soc. Ser. B **97** p. 149.

Anthocaris cardamines **var. n.** *striata* France p. 57, PIONNEAU Misc. ent. **27.**

Aporia bieti **f. n.** *magna* p. 2, *martineti* **ab. n.** *stötzneri* p. 3 W. China, DRAESEKE Iris **38.**—*A. crataegi*, biology, morphology pp. 273–321 fig., STELLWAAG Zs. angew. Ent. **10.**

Appias albina **var. n.** *norma* Ceylon p. 971, EVANS J. Bombay N. H. Soc. **29.**—*A. sabina* **ab. n.** *divisapex; epaphia* **abb. n.** *arctimargo, decolorata, confluens; canisia* **sp. n.** Central Africa p. 94, HULSTAERT Rev. zool. afr. **12.**

Catopsilia pomona **f. n.** *pura*, **hybr. n.** *dinkelmanni* (*crocale* × *pomona*) India p. 2, LINDNER Ent. Rdsch. **41.**—*C. pyranthe* notes p. 119, MARTIN Mitt. Munchn. ent. Ges. **14.**

Colias palaeno europome **ab. n.** *sitowskii* Poland p. 241 fig., BIEZANKO Arch. Natg. **90** A 5.—*C. cocandica* **subsp. n.** *irma* p. 972 fig., *montium* **subsp. n.** *longto, pugo* **sp. n.** p. 973 Tibet, EVANS J. Bombay N. H. Soc. **29.**—*C. hyale* several **abb. n.** pp. 21–23, *myrmidone* numerous **abb. n.** pp. 25–31 Regensburg, METSCHL Ber. natw. Ver. Regensb. **16.**—*C. phicomone* **ab. n.** *phaedra* Tyrol p. 79, SCHAWERDA Mitt. Munchn. ent. Ges. **14.**—*C. myrmidone* notes p. 182, SCHREIBER Intern. ent. Zs. **17.**—*C. phicomone* **f. n.** *fleischmanni* Feldkirch pp. 37–39, STAUDER Intern. ent. Zs. Guben **18.**—*C. hyale* **subsp. n.** *irkutskana* Irkutsk p. 62, *staudingeri* **f. n.** *lugens, aurora* **ff. n.** *stenotaenia, ochreopicta, pupillata* p. 63, *cocandica* **f. n.** *pupillata* p. 64 Turkestan, STAUDER Mitt. Munchn. ent. Ges. **14.**—See *Eurymus.*

Delias gabia **subsp. n.** *marinda* Dutch N. Guinea p. 75, HULSTAERT Ann. Soc. ent. Belg. **64.**—*D. prouti* p. 508, *schmassmani* p. 509, *apatela, eschatia* p. 510, **spp. n.**, *vidua* ♂ described Buru p. 511, *aglaia goda* **f. n.** *flavifascia* Sumatra p. 566 figs., JOICEY & TALBOT Bull. Hill Mus. **1.**

Dercas verhueli **var. n.** *parva* Burma p. 972, EVANS J. Bombay N.H. Soc. **29.**

Euchloë ausonia second brood p. 90, GRAVES Ent. Rec. **36.**—*E. belia* **subsp. n.** *naina* Siberia p. 2, KOZHANTSCHIKOV Jahrb. Martjanov. Staatsm. Minussinsk **1** 1923.—*E. ausonia libyca* **f. n.** *syrtica* Tripoli p. 31 figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Eurymus hartfordii ♀ **ab. n.** *weaverae* p. 156, *eurytheme* **f.** *amphidusa* ♂ **ab. n.** *unicitrina* California figs. p. 158, GUNDER Ent. News **35.**—See *Colias.*

Gandaca harina **subsp. n.** *cuneata* Ceram p. 566, JOICEY & TALBOT Bull. Hill Mus. **1.**

Gonepteryx spp. notes p. 70, WARNECKE Mitt. Munchn. ent. Ges. **14.**

Ixias pyrene hainana **f. n.** *maculosa* Hainan p. 529, JOICEY & TALBOT Bull. Hill Mus. **1.**

Leptosia sinapis **f. n.** *monovittata* Italy p. 111, VERITY Ent. Rec. **36.**

Metaporia acraea **f. n.** *funkei* W. China p. 4, DRAESEKE Iris **38.**

Mylothris pernaria p. 91, *aneria* p. 92 Kamerun **spp. n.**, *ruppellii rhodesiana pallidior, ruppellii kikuyensis aspilota, yulei sulphurascens*, p. 92 **abb. n.**, Congo HULSTAERT Rev. zool. afr. **12.**—*M. solilucis* Schultze (= *interposita* J. & T.) p. 573, JOICEY & TALBOT Bull. Hill Mus. **1.**

Pieris rapae olfactory sense p. 339 fig., MINNICH J. Exptl. Zool. **39**; **f. n.** *flavescens* p. 116, **ab. n.** *hallena* p. 178 no localities, BANDERMANN Intern. ent. Zs. **18**; f. *flavescens* Rbr. (= *flavescens* Banderm.) p. 153, STAUDER Intern. ent. Zs. **18.**—*P. brassicae*, structure of larval tegument pp. 69–71, BERTOLINI Redia **15**; **ab. n.** *henriettae* France p. 57, PIONNEAU Misc. ent. **27.**—*P. napi* **ab. n.** ♀ *semifasciata* p. 17, *brassicae* **ab. n.** ♀ *alligata* p. 25, Belgium, CABEAU Rev. mens. Soc. ent. Namur **24.**—*P. napi* **ab. n.** *elongata* p. 55, *rapae* **ab. n.** *binigrata* p. 66, Belgium, DERENNE Rev. mens. Soc. ent. Namur **24.**— *P. napi bryoniae* number of generations pp. 37–38, VORBRODT Schweizer ent. Anz. **3.**—*P. bryoniae*, two broods in Switzerland p. 8, FISCHER Mitt. Munch. ent. Ges. **14.**—*P. severina* **ff. n.** *acutapex* p. 94, *burgeoni, obscurissima; creona* **f. n.** *subalba* p. 95; *mesentina* **ab. n.** *punctifera; gidica* **f. n.** *masculina; pigea* **f. n.** *lathyi; calypso calypso* **abb. n.** *flavida, pulchricolor* p. 96; *calypso welwitschi* **ab. n.** *pauper; leplaei* **sp. n.** (with **f. n.** *reducta*); *theora* **ab. n.** *obscurata* p. 97; *rubrosignata* **f. n.** *overlaeti*, p. 98 Central Africa, HULSTAERT Rev. zool. afr. **12.**—*P.* (*Mancipium*) *brassicae* **f. n.** *cyniphia* Tripoli p. 27 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Synchloë stötzneri **sp. n.** W. China p. 6, DRAESEKE Iris **38.**

Terias apatosa **subsp. n.** *josepha* Kei Is. p. 76, HULSTAERT Ann. Soc. ent. Belg. **64.**

Teracolus vesta **abb. n.** *virescens, agapita* p. 98, *cosmas* **sp. n.** p. 99 Central Africa, HULSTAERT Rev. zool. afr. **12.**—*T. pleione* **f. n.** *eos* p. 199, *evenina* subsp. *liagore* **f. n.** *castina* p. 200, Eritrea fig., LE CERF Ann. Soc. ent. Fr. **93.**

Zerene eurydice ♂ **ab. n.** *fanniae* California p. 158 fig., GUNDER Ent. News **35.**

DANAIDAE.

Amauris lygia **sp. n.** Belgian Congo p. 476, HULSTAERT Rev. zool. afr. **12.**—*A. lobengula* **subsp. n.** *septentrionis* B. E. Afr. p. xxvi, POULTON Trans. Ent. Soc. **1924.**

Danaida affinis early stages p. 43 fig., HACKER Mem. Queensland Mus. **8.**—*D. juventa* **subsp. n.** *chevalieri* Dutch N. Guinea p. 77, HULSTAERT Ann. Soc. ent. Belg. **64.**—*D. melissa* **f. n.** *protoneptunia* Fiji p. 565 figs., POULTON Trans. Ent. Soc. **1923** 1924.—*D. plexippus* synonymy p. 16, BARNES & BENJAMIN Can. Ent. **56.**

Euploea batesi gorgonia, melanopa vertenteni, pumila simplificata, **subspp. n.** Dutch N. Guinea p. 78, HULSTAERT Ann. Soc. ent. Belg. **64.**—*E. helcita* **subspp. n.** *bourkei*, Samoa p. 585, *mathewi* Friendly Is. p. 586, *boisduvali* **subsp. n.** *simmondsi* Fiji p. 591, *tulliolus* **subsp. n.** *protoforsteri* Fiji p. 597 figs., POULTON Trans. Ent. Soc. **1923** 1924.

Eutresis pethoe **sp. n.** Costa Rica p. 249, GILLOTT Entomologist **57.**

Heringia **n. n.** for *Pigritia* Alm. p. 14, ALMEIDA Bol. Soc. ent. Brasil **1923.**

Heterosais (= *Rhadinoptera* d'Alm. type *nephele* Bates) p. 67, RILEY Entomologist **57.**

Mechanitis revision & key to spp. & forms p. 146 figs., FORBES J. N. Y. Ent. Soc. **32.**—*M. nessaea*, migration in Brazil pp. 165–166, MAY Bol. Mus. Nac. Rio de Janeiro **1.**

Pigritia Almeida see *Heringia.*

Rhadinoptera see *Heterosais.*

Tellervo zoilus **subspp. n.** *digulica, arctifascia* Dutch N. Guinea p. 79, HULSTAERT Ann. Soc. ent. Belg. **64.**—*T. assarica macrofallax* Strand (= *waigeuensis* J. & T.) p. 573, JOICEY & TALBOT Bull. Hill Mus. **1.**

NYMPHALIDAE.

Acca venilia **subsp. n.** *vertenteni* Dutch N. Guinea p. 80, HULSTAERT Ann. Soc. ent. Belg. **64.**

Aglais j-album **subsp. n.** *watsoni* Br. Columbia p. 109 fig., HALL J. N. Y. Ent. Soc. **32.**

Agrias synonymy p. 144, *amazonica* **ab. n.** *le cerfi* p. 147; *sardanapalus* **ab. n.** *sanguinea* p. 148; *narcissus* **subsp. n.** *obidonus; amydon* **abb. n.** *flavifasciata, bellatrix* p. 149; *amydon aristoxenus* **ab. n.** *citrinarius*; *pericles tryphon* **abb. n.** *extensa, flava* p. 150; *pericles trajanus* **abb. n.** *immaculata, viridipicta* p. 151; *pericles pericles* **ab. n.** *inornatrix; pericles* **subsp. n.** *peruviana* p. 152; *phalcidon* **abb. n.** *connectens, similis, micans; phalcidon* **subsp. n.** *excelsior* p. 153 (with **ab. n.** *flavibasis* p. 154); *hewitsonius* **subspp. n.** *jordani* p. 155, *rothschildi* p. 156 S. America, LATHY Ann. Mag. N. H. (9) **14.**—*A. sardanapalus* **abb. n.** *rubrimediana, purpurea, brunhilda* p. 14, *suprema, coccinata* p. 18 S. America, FASSL Ent. Rdsch. **41.**—*A. claudia* f. *claudina* notes pp. 15–16, MAY Bol. Soc. ent. Brasil **1923** no. 4–6. —*A.* discussion, bibliography, figures of many abb. described by Fassl, pp. 11–84, OBERTHÜR Etudes Lep. **22** pt. 1.

Anaea gudrun **sp. n.** Colombia p. 189, NIEPELT Intern. ent. Zs. **18.**

Apatura iris **ab. n.** *strandi* Poland p. 241 fig., BIEZANKO Arch. Natg. **90** Abt. A Heft 5; **ab. n.** *romaniszyni* Poland p. 3, SCHILLE Polsk. Pismo ent. **3.**—*A. elis fabaris* **f. n.** *xantho* Peru p. 139, LE CERF Bull. Mus. Hist. nat. Paris **1924.**

Apaturina erminea **subsp. n.** *aruensis* Aru Is. p. 569, JOICEY & TALBOT Bull. Hill Mus. **1.**

Araschnia levana-prorsa seasonal dimorphism p. 173 figs., SUFFERT Biol. Zentralbl. **44.**

Argynnis aphirape **abb. n.** *peleis, eustigmoea; euphrosyne* **ab. n.** *euphrosynella* Belgium p. 34, CABEAU Rev. mens. Soc. ent. Namur **24.**—*A. aglaia* **varr. n.** *ashretha,* ♀ *purpura* India p. 89, EVANS J. Bombay N. H. Soc. **30.**—*A. paphia* gynandromorph p. 74 figs., HERING Zool. Anz. **58**; melanistic forms from Baden pp. 82–87, WARNECKE Mitt. Bad. ent. Ver. **1**; var. *valezina* **ab. n.** *nigrizina* Britain p. 69 fig., FROHAWK Nat. Hist. Brit. Butterflies **1.**—*A. montivaga* ♂ **ab. n.** *mammothi* California p. 137 fig., GUNDER Ent. News **35.**—*A. nevadensis* **subspp. n.** *calgariana, semivirida* p. 42, *halcyone* **subsp. n.** *picta* p. 43 Canada, MCDUNNOUGH Can. Ent. **56.**—*A. adippe* **abb. n.** *margareta* p. 50, *susanna* p. 51 Austria, STEPHAN Ent. Anz. **4.**—*A.*, notes p. 456, *cydippe* **subspp. n.** *leechi* p. 454, *aglaiaeformis* p. 455; *laodice* **subspp. n.** *ferruginea, fletcheri* China, *cytheris* **subsp. n.** *falklandica* Falkland Is. p. 456, WATKINS Ann. Mag. N. H. (9) **13.**

Atella alcippe **varr. n.** *mercea, burmana* India p. 92, EVANS J. Bombay N. H. Soc. **30.**

Basilarchia revision of genus, key p. 167, *arthemis* **ab. n.** *benjamini* Massachusetts p. 171, **f. n.** *inornata* E. United States p. 174, NAKAHARA Bull. Brooklyn Ent. Soc. **19.**

Brenthis euphrosyne **ab. n.** *plumbea* Chilterns p. 8, COCKAYNE Ent. Rec. **36.**—*B. epithore* ♂ **ab. n.** *wawonae* California p. 156 fig., GUNDER Ent. News **35.**

Catasticta rochereaui **sp. n.** Colombia p. 138, LE CERF Bull. Mus. Hist. nat. Paris **1924.**

Charaxes, notes on Rhodesian pp. 308–316, LANNIN S. Afr. J. N. H. **4.** —*C. madensis* ♂ described Buru p. 512, JOICEY & TALBOT Bull. Hill Mus. **1.**—*C. etheocles* **f. n.** *imitatrix* no locality p. 50, NIEPELT Intern. ent. Zs. **18.**

Chlosyne california ♀ **ab. n.** *chinoi* California p. 157, fig., GUNDER Ent. News **35.**—*C. rosita* **sp. n.,** *lacinia* **subsp. n.** *montana* Central America p. 241 figs., HALL Entomologist **57.**

Cynthia erota buruana Fruh. (= *arsinoe buruana* Fruh.) ♀ described, Buru p. 513, *erota dioneia* ♀ described *arsinoë* **subspp. n.** *sulaensis* p. 567, *aruensis* p. 568, Dutch E. Indies, JOICEY & TALBOT Bull. Hill Mus. **1.**

Cyrestis thyodamas **var. n.** *indica* S. India p. 82, EVANS J. Bombay N. H. Soc. **30.**

Dichorragia ninus **subsp. n.** *buruensis* Buru p. 511, JOICEY & TALBOT Bull. Hill Mus. **1.**

Diestogyna obsoleta **subsp. n.** *integribasis* p. 477; *theodota* p. 478, *cyriaca* p. 479 (with **subsp. n.** *pallidior* p. 480), **spp. n.** Belgian Congo, HULSTAERT Rev. zool. afr. **12.**

Doleschallia bisaltide **var. n.** *merguiana* India p. 83, EVANS J. Bombay N. H. Soc. **30.**

Ergolis merione **var. n.** *assama* Sikkim p. 95, EVANS t.c.

Eriboea narcaea **var. n.** *aborica* India p. 896, EVANS op. cit. **29.**

Eulepis pyrrhus **subsp. n.** *juta* Kei Is. p. 80, HULSTAERT Ann. Soc. ent. Belg. **64.**

Euphydryas gilletti p. 111 figs., HALL J. N. Y. Ent. Soc. **32.**—*E. gabbi* ♂ *pasadenae, rubicunda* ♂ *foxi, editha* ♂ *fieldi* **abb. n.** California p. 155 fig., GUNDER Ent. News **35.**

Euptera sirene ♀ described p. 539, *pluto* **subsp. n.** *neptunus* p. 541 Africa, JOICEY & TALBOT Bull. Hill Mus. **1.**

Euthalia jahnu **var. n.** *jahnita* p. 902; *nara* **var. n.** *shania* p. 905 India, EVANS J. Bombay N. H. Soc. **29.**—*E. adonia* **subsp. n.** *baliensis* Dutch E. Indies p. 10, JURRIAANSE & VOLBEDA Entomologist **57.**

Euxanthe crossleyi magnifica Rebel (=*intermedia* J. & T.) p. 573, JOICEY & TALBOT Bull. Hill Mus. **1.**

Hypolimnas bolina nerina **varr. n.** *imperialis, formosa* Queensland p. 36 figs., ILLIDGE Queensl. Nat. **4** 1923.—*H. bolina lisianassa* **f. n.** *signata* Ceram p. 569, JOICEY & TALBOT Bull. Hill Mus. **1.**

Issoria sinha **var. n.** *pallida* India p. 92, EVANS J. Bombay N. H. Soc. **30.**

Limenitis rivularis **f. n.** *primigenia* Florence sep. p. 35, VERITY & QUERCI Ent. Rec. **36.**

Melitaea gabbi, egg & larva p. 45, COOLIDGE Bull. Brooklyn Ent. Soc. **19.**—*M. aurinia* **ab. n.** *rectiangula* Belgium p. 17, CABEAU Rev. mens. Soc. ent. Namur **24.**—*M. shandura* **sp. n.** Chitral p. 90, EVANS J. Bombay N. H. Soc. **30.**—*M. aurelia* in Coblenz p. 158, GOLTZ Intern. ent. Zs. **18.**—*M. chara* ♂ **ab. n.** *jacintoi* California p. 154 fig., GUNDER, Ent. News **35.**—*M. cinxia* **f. n.** *bifasciata, dictynna* **ab. n.** *semidetrita* S. Tyrol p. 42, HARTIG Ent. Rdsch. **41.**—*M. didyma* **ab. n.** *bockletii* no locality p. 168, HEUER Intern. ent. Zs. **17.**—*M. athalia* **var. n.** *pygmaea* Rumania p. 10, HORMUZAKI N. Beitr. syst. Insekt. **3.**—*M. athalia* **f. n.** *submaxima* sep. p. 40, *didyma* **ff. n.** *leopardata* sep. p. 37, *subpatycosana* sep. p. 38, Italy, VERITY & QUERCI Ent. Rec. **36.**

Neptis yerburyi **varr. n.** *sikkima* Assam p. 77, *shania* Burma p. 78, *ananta* **var. n.** *ochracea* Sikkim p. 79, *viraja* **var. n.** *kanara* S. India p. 80, EVANS J. Bombay N. H. Soc. **30.**—*N. shepherdi* **subsp. n.** *mucia* Dutch N. Guinea p. 79, HULSTAERT Ann. Soc. ent. Belg. **64.**

Pantoporia selenophora **var. n.** *kanara* India p. 74, EVANS J. Bombay N. H. Soc. **30.**

Penthema binghami **var. n.** *merguia* India p. 900, EVANS op. cit. **29.**

Phyciodes tharos pascoensis **ff. n.** *herse, nigrescens* Br. Columbia p. 110, HALL J. N. Y. Ent. Soc. **32.**

Planema obliqua ♀ described p. 539, JOICEY & TALBOT Bull. Hill Mus. **1.**

Polygonia c-aureum **subsp. n.** *lunulata* Formosa p. 55 fig., ESAKI & NAKAHARA Insec. Insc. Menst. **12.**

Pseudacraea eurytus mimicry p. 469, **f. n.** *opisthoxantha* Uganda p. 470, CARPENTER Trans. Ent. Soc. **1923.**

Pyrameis atalanta **ab. n.** *flava* Offenbach p. 141, EITEL Intern. ent. Zs. **18.**—*P. cardui* notes p. 145, KIEPER Intern. ent. Zs. **17**; migratory flight p. 1, POWELL Études Lep. **22** pt. 1; **ab. n.** *martha-maria* Germany p. 25, STEPHAN Soc. ent. **39 1924.**

Vanessa polychloros **ab. n.** *nigroflava* Poland p. 241 fig., BIEZANKO Arch. Natg. **90** A 5.—*V. canace* **varr. n.** *viridis, himalaya* India p. 85, EVANS J. Bombay N. H. Soc. **30.**

SATYRIDAE.

Notes on Satyrinae from New Guinea and Solomon Is., JORDAN Nov. Zool. **31** p. 279.

Notes on Morphinae of Colombia, KRÜGER Iris **38** p. 23.

Catalogue of type specimens of Satyridae in the British Museum, RILEY & GABRIEL Br. Mus. N. H. London 1924 62 pp.

Aphysoneura pigmentaria **subsp. n.** *occidentalis* Kamerun p. 37, JOICEY & TALBOT Entomologist **57.**—*A. obnubila* **sp. n.** Tanganyika p. xxviii, RILEY Trans. Ent. Soc. **1923** 1923.

Argyronympha synonymy and notes, *pulchra* **subsp. n.** *laeta* p. 294, *gracilipes* **sp. n.** p. 295, Solomon Is., JORDAN Nov. Zool. **31.**

Caligo, mimetic significance of wing markings pp. 16–19, GIACOMELLI Rev. chil. H. n. **27.**

Cercyonis ino **subsp. n.** *alope* Alberta p. 109 figs., HALL J. N. Y. Ent. Soc. **32.**

Coenonympha arcania **ab. n.** *bipupillata* Belgium p. 50, CABEAU Rev. mens. Soc. ent. Namur **24.**—*C. tiphon* var. *rhodopensis* biology p. 195, DRENOWSKI Trav. Soc. bulg. Sci. nat. **10** 1923.—*C. arcania* **ab. n.** *decolorata* Austria p. (155), GALVAGNI Verh. zool.-bot. Ges. Wien **73.**—*C. pamphilus* notes pp. 39–54, TURNER Proc. S. London Ent. Soc. **1923–24.**—*C. pamphilus* **ff. n.** *thanatos*, *eupompus*, *nigrita* Central Europe, *ferghanae* Central Asia p. 152, STAUDER Intern. ent. Zs. **17.**

Daedalma dinias **f. n.** *parvomaculata* Colombia p. 46, KRÜGER Ent. Rdsch. **41.**

Drucina orsedice **f. n.** *colombiana* Colombia p. 41, KRÜGER t.c.

Epinephele jurtina **ab. n.** *testacea* Poland p. 5, SCHILLE Polsk. Pismo ent. **3.**—*E. cyrenaicae* ♀ described p. 32 figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Erebia aethiops hermaphrodite p. 194, ALBERTI Zs. wiss. Insektenbiol. **19.**—*E. ligea* **ab. n.** *borisi* Bulgaria pp. 48, 56, BURESCH Trav. Soc. bulg. Sci. nat. **5** 1912.—*E. rhodopensis* biology p. 193, **var. n.** *gorgoneforme* Bulgaria p. 186, *tyndarus* var. *balcanica* biology p. 195, DRENOWSKI Trav. Soc. bulg. Sci. nat. **10** 1923.—*E.* of the Auvergne Mts. pp. 9–13, DUFOUR Misc. ent. **28.**—*E. phyllis* **subsp. n.** *irma* Tibet p. 972, EVANS J. Bombay N. H. Soc. **29.**—*E. aethiops leucotaenia* **abb. n.** *biocellata*, *reducta*; *ligea* **ab. n.** *nigropunctata*; *adyte* **ab. n.** *biocellatoides* p. 42; *euryale* **abb. n.** *pleni-ocellata*, *latifasciata*, *bipunctata*, *defessa* S. Tyrol p. 43, HARTIG Ent. Rdsch. **41.**—*E. ligea* **ab. n.** *reisseri* Austria p. 25, *pronoë* **var. n.** *gardeina* p. 84, **abb. n.** *depuncta*, *leukophtalma* p. 85, *nocturna* p. 86 Dolomites, SCHAWERDA Mitt. Munchn. ent. Ges. **14.**—*E. glacialis* **varr. n.** *kaseria*, *teriola*, *carolia* p. (3) Tyrol, SCHAWERDA Verh. zool.-bot. Ges. Wien **73.**—*E. erda* **sp. n.** Siberia p. 165, SHELJUZHKO Ent. Anz. **4.**—*E. nerine* notes p. 66, STAUBENRAUCH Mitt. Munchn. ent. Ges. **14.**

Eryphanis seleucida ♂ re-description p. 30, SEYDEL N. Beitr. syst. Ins. **3.**

Euptychia virgata **sp. n.** Brazil p. 570, JOICEY & TALBOT Bull. Hill Mus. **1.**

Harsiëssis synonymy and notes, *hygea* **subspp. n.** *tenebrica* p. 291, *nigrita* p. 292, Papuan group, JORDAN Nov. Zool. **31.**

Hipparchia semele geographical variation, **ff. n.** *angliae*, *anglorum* England p. 22, *paeninsulitaliae* Florence p. 24, VERITY Ent. Rec. **36.**

Hyalodia **gen. n.** for *Hypocysta tenuisquamosa* Joicey & Talbot p. 285, JORDAN Nov. Zool. **31.**

Hypocysta synonymic and other notes on Papuan and Australian, *aroa* **subsp. n.** *aspis* p. 280, *osyris* **subspp. n.** *lepida* p. 283, *aruana* p. 284 Papua, JORDAN Nov. Zool. **31.**—*H. tenuisquamosa*, Joicey & Talbot see *Hyalodia*.

Lethe callipteris **subsp. n.** *diluta*, *minima* **ab. n.** *suffusa* Japan p. 56 fig., ESAKI & NAKAHARA Ins. Insc. Menstr. **12.**

Lymanopoda nevada **sp. n.** p. 7, *gortina* ♂, *apiculata* ♀ p. 16, *huilana* var. *tolima* ♀ p. 7, *maso* ♀ p. 19 described, Colombia, KRÜGER Ent. Rdsch. **41.**—*L. excisa* **subsp. n.** *decorata* Colombia p. 32, SEYDEL N. Beitr. syst. Ins. **3.**

Melanargia japygia suwarovius **ff. n.** *bisoculata*, *completissima* E. Russia p. 64, STAUDER Mitt. Munchn. ent. Ges. **14.**

Morpho absoloni **sp. n.** Brazil p. 217, MAY Bol. Mus. Nac. Rio de Janeiro **1.**

Mycalesis transfasciata **sp. n.** Dutch N. Guinea p. 81, HULSTAERT Ann. Soc. ent. Belg. **64.**—*M. aurivilli* **subsp. n.** *kivuensis* Africa p. 542, JOICEY & TALBOT Bull. Hill Mus. **1.**

Neonympha areolatus **var. n.** *septentrionalis* New Jersey p. 107 fig., DAVIS J. N. Y. Ent. Soc. **32.**

Neope gotschevitschi **f. n.** *dealbata* (no locality) p. 64, STAUDER Mitt. Munchn. ent. Ges. **14.**

Oeneis aello notes p. 322, BELLING D. ent. Zs. **1924.**

Pararge megera **ab.. n.** *triocellata* Passau p. 142, Sälzl Mitt. Munchn. ent. Ges. **14.**

Pedaliodes combeima, pacifica p. 23, *puracana* p. 28, *oculata* p. 31 **spp. n.**, *paeonides* **ff. n.** *flavopunctata* p. 28, *obscura* p. 31 Colombia, Krüger Ent. Rdsch. **41.**

Pierella incanescens **subsp. n.** *pacifica* S. Colombia p. 137, Niepelt Intern. ent. Zs. **17.**

Platypthima synonymy and notes, *placiva* **sp. n.** p. 287, *dispar* **subsp. n.** *huonis* p. 289, *pandora* **subsp. n.** *goliathina* p. 290 New Guinea, *homochroa* **subsp. n.** *satisbona* Goodenough Is. p. 289, Jordan Nov. Zool. **31.**

Satyrus arethusa var. *dentata* **ab. n.** *obsoleta* France pp. 226–227, Pionneau Proc. verb. Soc. linn. Bordeaux **75** 1923. —*S. dryas* **ab. n.** *caeca* Dolomites p. 87, Schawerda Mitt. Munchn. ent. Ges. **14.**—*S. semele* **subsp. n.** *pellucida* Transcaucasus p. 64, *arethusa* **subsp. n.** *heptapotamica* Siberia p. 65, Stauder Mitt. Munchn. ent. Ges. **14.**

Thiemeia ortruda **f. n.** *obscurata* Colombia p. 38, Krüger Ent. Rdsch. **41.**

Libytheidae.

Libythea celtis **ab. n.** *conjuncta* Dolomites p. 88, Schawerda Mitt. Munchn. ent. Ges. **14.**

Erycinidae (Riodinidae).

Abisara barnsi ♂ described Congo p. 543, Joicey & Talbot Bull. Hill Mus. **1.**—*A.* notes pp. 39–40, *sabina* **sp. n.** Celebes p. 40, Stichel N. Beitr. syst. Ins. **3.**

Ancyluris aulestes **subsp. n.** *pirene* S. America p. 145, Stichel D. ent. Zs. **1924.**

Esthemopsis inaria thyatira **ff. n.** *perfluxa, sarta* p. 2, Stichel N. Beitr. syst. Insekt. **3.**

Eurybia silaceana **sp. n.** S. America p. 141, Stichel D. ent. Zs. **1924.**

Euselasia key, *violacea* p. 284, *fournierae* **spp. n.**; *opalescens* **subspp. n.** *joiceyi* (described by Talbot) p. 285, *interrupta* p. 284 S. America, Lathy Ann. Mag. N. H. (9) **14.**—*E. artos* **subsp. n.** *ignitus* p. 246, *ella* **subsp. n.** *terrea* p. 247, *nannothis* p. 247, *praecipua* p. 248 **spp. n.**, *orfita eutychus* **f. n.** *truculenta* p. 249 Brazil, Stichel Zs. wiss. Insektenbiol. **19.**

Mesosemia junta **subsp. n.** *sidonia* S. America p. 140, Stichel D. ent. Zs. **1924.**

Nemeobius lucina notes pp. 48–50, Stephan Zs. wiss. Insektenbiol. **19.**

Nymphidium leucosia **subsp. n.** *semiramis, caricae* **subsp. n.** *parthenium* S. America p. 150, Stichel D. ent. Zs. **1924.**

Rhetus arcius **subsp. n.** *pacificus* S. America p. 145, Stichel t.c.

Lycaenidae.

Early stages of W. African Lycaenidae, Pomeroy Trans. Ent. Soc. London **1924** pp. lxxiii–lxxix.

Notes on life-history of Lycaenidae of Victoria, Thorn Vict. Nat. **41** p. 43 figs.

Lycaenid larvae and ants, Reuss Intern. ent. Zs. **17** pp. 177–179, Rangnow op. cit. **18** pp. 10–11, Meissner op. cit. **18** p. 146.

Aethiopana honorius **ab. n.** *coarctata* Belgian Congo p. 118, Hulstaert Rev. zool. afr. **12.**

Agriades thetis variation p. 6, Cockayne Ent. Rec. **36.**

Alaena bicolora **sp. n.** Africa p. 130, Bethune-Baker Ann. Mag. N. H. (9) **14.**—*A. aurantiaca* ♀ described Congo p. 543, Joicey & Talbot Bull. Hill Mus. **1.**

Aricia medon origin of races in Br. Isles pp. 89–106 figs., Harrison & Carter Trans. N. H. Soc. Newcastle **6.**

Axiocerses mendeche **ab. n.** *bistrigata* Africa p. 421, Aurivillius in Seitz Fauna afr., Lief. **13.**—*A. eustorgia* **sp. n.** Belgian Congo p. 179, Hulstaert Rev. zool. afr. **12.**

Brephidium exilis life-history pp. 115–121, Coolidge Ent. News **35.**

Callipsyche behrii ♂ **ab. n.** *nigroinita* California p. 154 fig., Gunder Ent. News **35.**

Callophrys avis life history pp. 43–44, Simmons Entomologist **57.**

Chrysophanus dispar rutilus **ab. n.** *albidoflava* Austria p. (21), BAYER Verh. zool.-bot. Ges. Wien **73.**—*C. chryseis* **ab. n.** ♂ *bourdouxhei* Belgium p. 18, CABEAU Rev. mens. Soc. ent. Namur **24.**—*C.*, notes on Palaearctic spp. p. 18, KORB Mitt. Munchn. ent. Ges. **14.**—*C. hippothoë* **subsp. n.** *sajana* Siberia p. 10, KOZHANTSHIKOV Jahrb. Martjanov. Staatsm. Minussinsk **1** 1923.—*C. hippothoë, dispar, rutilus,* discussion p. 229, MANON Proc.-verb. Soc. linn. Bordeaux **75.**—*C. virgaureae* **ab. n.** *alba* Bavaria p. 40, SCHOENFELD Intern. ent. Zs. **18.**—*C. dorilis* **subsp. n.** *reverdini* Lower Italy p. 24, STAUDER Soc. ent. **39.**

Cigaritis, notes on Palaearctic species p. 18, KORB Mitt. Munchn. ent. Ges. **14.**

Crudaria leroma **f. n.** *albomaculata* Africa p. 432, AURIVILLIUS in Seitz Fauna afr. **13.**

Cupidesthes hilarion **sp. n.** Kamerun p. 180, HULSTAERT Rev. zool. afr. **12.**

Cyclirius vulcanica **sp. n.** Tanganyika, *aequatorialis* **subsp. n.** *marungensis* p. 547, *juno* **subsp. n.** *ruandensis, noquasa* **subsp. n.** *major* p. 548 Congo, JOICEY & TALBOT Bull. Hill Mus. **1.**

Deudorix mariana, anetia p. 120, *feminina* p. 121, *nicephora* p. 173, **spp. n.** Belgian Congo, HULSTAERT Rev. zool. afr. **12.**

Egumbia **gen. n.** *catori* **sp. n.** Nigeria p. 135, BETHUNE-BAKER Ann. Mag. N. H. (9) **14.**

Eicochrysops **gen. n.** *eicotrochilus* p. 132, *rogersi* p. 133, **spp. n.** Africa, BETHUNE-BAKER t.c.

Epamera berbera **sp. n.** Somaliland p. 131, BETHUNE-BAKER t.c.

Erora gillottae **sp. n.** Costa Rica p. 88, RILEY Entomologist **57.**

Euchrysops kalrosae **subsp. n.** *reducta, severini* p. 185, *fescennia* p. 186, **spp. n.** Congo, *osiris* **subsp. n.** *orientalis* Uganda, *osiris* **f. n.** *australis* Congo p. 187, HULSTAERT Rev. zool. afr. **12.**

Heodes phlaeas geographical races p. 642, **subspp. n.** *flavens* Tibet p. 725, *coccineus* Tian-Shan p. 726, *japonica* Japan p. 729, *hyperborea* Arctic p. 739 figs., FORD Trans. Ent. Soc. **1923** 1924; notes on breeding p. 179, MATHEW Entomologist **57.**—*H. helloides* life-history pp. 306–312, COOLIDGE Ent. News **35.**—*H. epixanthe* **subsp. n.** *phaedrus* N. America p. 111, HALL J. N. Y. Ent. Soc. **32.**—*H.*, notes on Swedish pp. 90–98, *amphidamas* ab. *aestiva* **n. n.** for ab. *obscura* Lampa p. 97, WAHLGREN Ent. Tidsk. **45.**

Hewitsonia boisduvali **ab. n.** *albifascia* Kunzulu p. 118, HULSTAERT Rev. zool. afr. **12.**

Hypolycaena buxtoni **f. n.** *rogersi* Mombasa p. 131, BETHUNE-BAKER Ann. Mag. N. H. (9) **14.**—*H. symmacha* p. 175, *sebasta* p. 176, **spp. n.** Belgian Congo, HULSTAERT Rev. zool. afr. **12.**

Iolaus obscurus **sp. n.** Damaraland p. 406, AURIVILLIUS in Seitz Fauna afr. **13** 1923.—*I. timon* **subsp. n.** *orientius* Uganda, *anesius* **sp. n.** Belgian Congo p. 177, HULSTAERT Rev. zool. afr. **12.**

Lachnocnema obliquisigna, rectifascia, **spp. n.** Belgian Congo p. 119, HULSTAERT Rev. zool. afr. **12.**

Lampides euchylas **subsp. n.** *gloriel* Kei Is. p. 80, HULSTAERT Ann. Soc. ent. Belg. **64.**

Liptena synesia **sp. n.** Belgian Congo p. 118, HULSTAERT Rev. zool. afr. **12.**

Loweia dorilis **f. n.** *italaveris* Italy p. 108, VERITY Ent. Rec. **36.**

Lycaena coridon or *hispana* in Belgium p. 29, BALL Bull. Soc. ent. Belg. **6.**—*L. thersites* **abb. n.** *caerulescens, caerulea, amethystina,* Belgium p. 67, CABEAU Rev. mens. Soc. ent. Namur **28.**—*L. orion* **subsp. n.** *tytleri* Tibet p. 973, EVANS J. Bombay N. H. Soc. **29.**—*L. meleager* **f. n.** *argentata* S. Tyrol p. 45, HARTIG Ent. Rdsch. **41.**—*L. euphemus* **ab. n.** *obscura* Poland p. 91, KAUCKI Polsk. Pismo ent. **3.**—*L. cyane* **ab. n.** *radiata* Siberia p. 12, KOZHANTSHIKOV Jahrb. Martjanov. Staatsm. Minussinsk **1** 1923.—*L. euphemus* **f. n.** *splendens* Siberia p. 67, KOZHANTSHIKOV Jahrb. Martjanov. Staatsmus. **2** 1.—*L. argus* aberrations discussed p. 8, **ab. n.** *caeruleomarginata* Freiburg p. 134, LANGE Iris **38.**—*L. coridon* **abb. n.** *infuscata* p. 81, *fuscociliata* p. 82, Regensburg, METSCHL Ber. natw. Ver. Regensburg **16.**—*L. damon* **var. n.** *ultramarina* Alps p. 24, SCHAWERDA

Mitt. Munchn. ent. Ges. **14.**—*L. icarus* **ab. n.** *privata* Prague p. 40, SCHOENFELD Intern. ent. Zs. **18.**—*L. dolus* **ff. n.** *crassipunctata, obsoleta, exoculata* S. Italy p. 27, STAUDER Soc. ent. **39.**—*L. serpentatoides* **sp. n.** S. W. Australia p. 146, STRAND Iris **38.**—*L. arion* **r. n.** *australpina* Italy p. 109, VERITY Ent. Rec. **36.**—*L. arionides* **f. n.** *selzeri* Siberia p. 149 figs., WARNECKE Iris **38.**

Lycaenesthes thyrsis **ab. n.** *unicolor* Africa p. 439, AURIVILLIUS in Seitz Fauna afr., Lief. **13** 1923.—*L. philo* **f. n.** *praeclara* Celebes p. 897, *lycaenina* **subsp. n.** *villosina* Mindanao p. 898, FRUHSTORFER in Seitz Fauna indoaus., Lief. **148** 1923.—*L. schoutedeni, lysias* **spp. n.,** *lunulata* **subsp. n.** *aquilonis* p. 181, *lunulata* **ab. n.** *magna, crawshayi* **subsp. n.** *marginata* p. 182, *onias* **sp. n.** p. 183 Belgian Congo, HULSTAERT Rev. zool. afr. **12.**

Mimacraea marshalli dohertyi early stages p. 152 figs., ELTRINGHAM Trans. Ent. Soc. **1924.**—*M. charmian* **subsp. n.** *ertli* Congo ; *fulvaria* **subsp. n.** *alciopina,* Kumasi p. 38, JOICEY & TALBOT Entomologist **57.**

Mitoura loki (corrected to *siva* **36** 1925 p. 26), life-history pp. 199–204, COOLIDGE Ent. News **35.**

Myrina anettae **sp. n.** Fr. Guinea p. 161, FLEURY Bull. Soc. ent. Fr. **1924.**

Neochrysops proclus p. 188, *sylvius* p. 189, *anerius* p. 190, *orontius* p. 191, *menna* p. 192, *brabo, theodota* p. 193 **spp. n.** Belgian Congo, *parsimon* **ab. n.** *albicans* Uganda p. 194, HULSTAERT Rev. zool. afr. **12.**

Oboronia arctimargo **sp. n.** Belgian Congo & Kamerun p. 194, HULSTAERT Rev. zool. afr. **12.**

Oxylides mixtura **sp. n.** Belgian Congo p. 174, HULSTAERT t.c.

Pentila mesia **sp. n.** Kamerun, *petreia* **subsp. n.** *connectens* p. 115, *nyassana* **subspp. n.** *elisabetha, alberta* p. 116 Belgian Congo, HULSTAERT t.c. —*P. auga catauga* Rebel (=*congoensis* J. & T.) p. 573, JOICEY & TALBOT Bull. Hill Mus. **1.**

Phaedrotes piasus notes pp. 232–233, BARNES & BENJAMIN Ent. News **35.**

Phasis marshalli **sp. n.** Gazaland, *damarensis* **ab. n.** *punctata* p. 427, *sardonyx* **ab. n.** *peringueyi, thysbe* **var. n.** *nigricans* p. 430, S. Africa, AURIVILLIUS in Seitz Fauna afr. **13.**—*P. conradsi* **f. n.** *ochraceus* Tanganyika p. 546, JOICEY & TALBOT Bull. Hill Mus. **1.**

Plebeius shasta **var. n.** *comstocki* California p. 140, FOX Ent. News **35.**—*P. argus* **ff. n.** *veris, pallidula* Italy, p. 110, VERITY Ent. Rec. **36.**

Polyommatus filenus redescription p. 359, WOOD Ent. News **35.**

Pseuderesia tessmanni **f. n.** *decolorata, isca* **ab. n.** *demaculata* Kamerun, *staphyla* **sp. n.** Belgian Congo p. 117, HULSTAERT Rev. zool. afr. **12.**

Pseudodipsas eone **subsp. n.** *iovis* New Guinea p. 899, FRUHSTORFER in Seitz Fauna indoaustr. Lief. **148** 1923.

Spindasis natalensis **ab. n.** *obscura* Natal p. 413, AURIVILLIUS in Seitz Fauna afr. Lief. **13** 1923.—*S. apuleia* **sp. n.** Belgian Congo p. 178, HULSTAERT Rev. zool. afr. **12.**—*S. montana* **sp. n.** Congo p. 545, JOICEY & TALBOT Bull. Hill Mus. **1.**

Syrmoptera nivea **sp. n.** p. 544, **f. n.** *androgyna* p. 545 Congo, JOICEY & TALBOT t.c.

Telipna exsuperia p. 112, *atrinervis,* p. 113 Kamerun, *sulpitia* p. 114 Belgian Congo **spp. n.,** HULSTAERT Rev. zool. afr. **12.**

Thestor, notes on Palaearctic species p. 18, KORB Mitt. Munchen. ent. Ges. **14.**—*T. ballus* **ff. n.** *cyrenaica* p. 35, *illuminata* p. 36 Tripoli figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Triclema lydia **sp. n.** Belgian Congo p. 184, HULSTAERT Rev. zool. afr. **12.**

Zeritis neriene **f. n.** *muzizii* S.E. Africa p. 134, BETHUNE-BAKER Ann. Mag. N. H. (9) **14.**

Zizera publia **sp. n.** Belgian Congo p. 184, HULSTAERT Rev. zool. afr. **12.**

HESPERIIDAE.

On the male genitalia of the Hesperiidae of N. America, SKINNER & WILLIAMS Trans. Amer. Ent. Soc. **50** pp. 57–74, 141–156, 177–208 figs.

Acentrocneme hesperiaris, morphology of larva, DAMPF Rev. Mexicana de Biologia **4** reprint 15 pp. 10 figs.

Atrytonopsis loammi Whitney (= *Parnara apostologica* Strand) p. 249, McDUNNOUGH Can. Ent. **56.**

Bolla semitincta **sp. n.** Mexico p. 15, DYAR Ins. Insc. Mens. **12.**

Daimio sinica **var. n.** *saishiuana* Quelpart Island p. 92 fig., OKAMOTO Bull. Agric. Expt. Sta. Govt. Gen. Chosen **1.**

Erynnis barcaeus **sp. n.** Tripoli p. 37 fig., TURATI Atti Soc. ital. Sci. nat. **63.** —*E. alceae* **ff. n.** *praeaustralis, magnaustralis, griseofulva, altheae* **f. n.** *fulvipinnulis* Italy p. 106, VERITY Ent. Rec. **36.**

Hesperia revision of Ethiopian p. 64, *paula* p. 77, *bifida* p. 111 **spp. n.,** *transvaaliae* **varr. n.** *confusa, fasciata* p. 90, *obscura* p. 92, *dromus* **varr. n.** *elongata, meridionalis* p. 95 Africa figs., HIGGINS Trans. Ent. Soc. **1924.**—*H. comma* significance of wax glands in larvae pp. 97–100 fig., SULC Ceskoslov. spolecn. Jubilej. Sbornik 1924.—*H. armoricanus* **f. n.** *tersa, onopordi* **f. n.** *tersior* Italy p. 107, VERITY Ent. Rec. **36.**—*H. freija* **sp. n.** Europe p. lvi figs., WARREN Trans. Ent. Soc. London **1924.**

Hylephila phylaeus life-history pp. 319–335, COOLIDGE Trans. Amer. Ent. Soc. **50.**

Pamphilus palaemon **ab. n.** *ederi* Tyrol p. (4), SCHAWERDA Verh. zool.-bot. Ges. Wien **73.**

Parnara apostologica Strand see *Atrytonopsis loammi* Whitney.

Pholisora ascalaphus U.S. records of p. 370, BARNES & BENJAMIN Ent. News **35.**

Pyrrhogyra neoerea ophni (=*catharinae* ♀) p. 14, FERREIRA D'ALMEIDA Bol. Soc. ent. Brasil **1923.**

Pyrrhopygopsis revision p. 245, *cleanthes* **subsp. n.** *ambicola* Brazil p. 246; *quispica* **f. n.** *rubripalpis* S. America p. 248, RILEY Entomologist **57.**

Telegonus domingensis **sp. n.** Santo Domingo p. 39, JOICEY & TALBOT Entomologist **57.**—*T. antiquus* Skinn. (= *T. domingensis* J. & T.) p. 574, JOICEY & TALBOT Bull. Hill Mus. Witley **1.**

Thanaos tages **f. n.** *posticeprivata* Tyrol p. 68, STAUDER Mitt. Munchn. ent. Ges. **14.**

Urbicola comma **rr. n.** *aurata, orae* Italy p. 107, VERITY Ent. Rec. **36.**

Heterocera.

Biology of some Microlepidoptera in Sweden, BENANDER Ent. Tidsk. **45** pp. 169–177.

Contributions to the Heterocerous fauna of Belgium, CANDÈZE Bull Soc. ent. Belg. **6** pp. 42–46.

Handbook on practical Entomology. I Abt. III Bd. Sphingidae to Lymantriidae, LEDERER 1923 172 pp.

Microlepidopterous fauna of Dresden, SCHOPFER Iris **37** p. 82.

SYNTOMIDAE.

Aclytia modesta **sp. n.** Argentina p. 12 fig., KÖHLER Fauna Argentina II.

Agyrta macasia **sp. n.** Ecuador p. 14, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Amata timura **sp. n.** Tenimber p. 128, HULSTAERT Ann. Mag. N. H. (9) **13.**—See *Syntomis.*

Antichloris lamalissa **sp. n.** Costa Rica p. 11, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Apisa manettii **sp. n.** Cyrenaica p. 46 figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Autochloris ethela Ecuador, *solimoes* Brazil, **spp. n.** p. 2, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Balacra erubescens **sp. n.** Congo p. 549, JOICEY & TALBOT Bull. Hill Mus. **1.**

Ceryx flavigutta **sp. n.** Dutch N. Guinea p. 85, HULSTAERT Ann. Soc. ent. Belg. **64.**

Chlorostola anusia **sp. n.** Mexico p. 13, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Chrostosoma enna Colombia ?, *lea* Br. Guiana, **spp. n.** p. 6, SCHAUS t.c.

Cosmosoma joavana Costa Rica, *greta* Brazil, **spp. n.** p. 7, SCHAUS t.c.

Cyanopepla dognini **sp. n.** Brazil p. 105, HULSTAERT Ann. Soc. ent. Belg. **64.**

Delphyre nilammon **sp. n.** Br. Guiana p. 14, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Dycladia marmana Br. Guiana, *basimacula* Venezuela & Trinidad, **spp. n.** p. 9, SCHAUS t.c.

Dysauxes ancilla **ab. n.** *bipunctata* Bulgaria p. 100, BURESCH Trav. Soc. bulg. Sci. nat. **7** 1915.

Episcepsis satania **sp. n.** Mexico p. 11, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Eucereon duthaca Brazil p. 16, *theophanes* Br. Guiana p. 17, *cyneburge* West Indies, *chosica* Peru p. 18, **spp. n.**, SCHAUS t.c.

Euchromia rubrilinea **sp. n.** Dutch N. Guinea p. 85, HULSTAERT Ann. Soc. ent. Belg. **64.**

Gymnelia ducei Colombia p. 3, *cennocha* Panama, *ludga* Colombia ? p. 4, **spp. n.**, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Heliura nathalan, cadroe **spp. n.** Br. Guiana p. 15, SCHAUS t.c.

Horama serena **sp. n.** Panama p. 12, SCHAUS t.c.

Isanthrene roreri **sp. n.** Ecuador p. 1, SCHAUS t.c.

Leucopleura ciarana **sp. n.** Panama p. 12, SCHAUS t.c.

Loxophlebia tibba **sp. n.** Venezuela p. 6, SCHAUS t.c.

Lymire lacina **sp. n.** Cuba p. 12, SCHAUS t.c.

Macrocneme euphrasia **sp. n.** Br. Guiana p. 10, SCHAUS t.c.

Metarctia bipuncta **sp. n.** Africa p. 549, JOICEY & TALBOT Bull. Hill Mus. **1.**

Pheia dosithea Venezuela, *proteria* Panama, **spp. n.** p. 5, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Propyria morelosia Mexico, *fridolinia* Guatemala, **spp. n.** p. 19, SCHAUS t.c.

Pseudaethria **gen. n.** (near *Aethria*) *cessogae* **sp. n.** Brazil p. 10, SCHAUS t.c.

Psilopleura senana **sp. n.** Brazil p. 7, SCHAUS t.c.

Sarosa albraamea **sp. n.** Br. Guiana p. 3, SCHAUS t.c.

Saurita anselma Panama, *geralda* Venezuela, **spp. n.** p. 8, SCHAUS t.c.

Sphecosoma besasa **sp. n.** Brazil p. 1, SCHAUS t.c.

Syntomis alicia var. *mogadorensis* **ab. n.** *flavocingulata* Morocco p. 78, LUCAS Bull. Soc. ent. Fr. **1924.**—*S. aurivala* **sp. n.** Mesopotamia p. (161) fig., SCHAWERDA Verh. zool.-bot. Ges. Wien **73.**—*S. herthula* **ff. n.** *atavistica, cataleptica* Transcaspia p. 59, STAUDER Mitt. Munchn. ent. Ges. **14.**—*S. phegea* **subsp. n.** *bessarabica* Bessarabia p. 219, STAUDER Iris **38.**—See *Amata.*

Thyrosticta octopunctata, obliquipuncta **spp. n.** Madagascar p. 306, ROTHSCHILD Ann. Mag. N. H. (9) **14.**

ARCTIIDAE.

Agylla tygriusa **sp. n.** Ecuador p. 21, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Alyra fumosa **sp. n.** Argentina p. 13 fig., KÖHLER Fauna Argentina II.

Amastus gilvus **sp. n.** Argentina p. 16 figs., KÖHLER t.c.—*A. vendregisili* **sp. n.** Ecuador p. 34, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Ammalo ramsdeni **sp. n.** Cuba p. 32, SCHAUS t.c.

Arctia caja numerous **abb. n.** Austria pp. 70–71, STATTERMAYER Ent. Anz. **4**; abnormal metamorphosis pp. 164–170 fig., ROSSET Butll. Inst. cat. Hist. nat. **4**; variations pp. 12–15, DERENNE Rev. mens. Soc. ent. Namur **24.**—*A. hebe* **ab. n.** *melaena* p. 69, *caja* **ab. n.** *quasi-monochromica* p. 73 fig., Poland, BIÈZANKO Polsk. Pismo ent. **3.**—*A. ungemachi* **sp. n.** Morocco p. 147, LE CERF Bull. Soc. ent. Fr. **1924.**—*A.* (*Cletis*) *maculosa* **ab. n.** *kindervateri* Austria p. (90) fig., SCHAWERDA Verh. zool.-bot. Ges. Wien **73**; **f. n.** *insularia* Siberia p. 69, KOZHANTSHIKOV Jahrb. Martjanov. Staatsmus. **2** 1.—*A. testudinaria* **ab. n.** *perilypa* Dolomites p. 116, SCHAWERDA Mitt. Munchn. ent. Ges. **14.**

Asura punctilinea, roseifusa p. 129, *terminodenta* p. 130, *atrinervis* (with **ab. n.** *flava*) p. 131, **spp. n.** Dutch E. Indies, HULSTAERT Ann. Mag. N. H. (9) **13.**—*A. punctilinea* **subsp. n.** *aquilonis* Kei Is. p. 88, HULSTAERT Ann. Soc. ent. Belg. **64.**—*A. modvena* **sp. n.** Philippines p. 26, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Automolis mathildae **sp. n.** Argentina p. 16 figs., KÖHLER Fauna Argentina II. —*A. postradiata* **sp. n.** Colombia p. 31, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Boenasa toryca Cuba p. 29, *angelica* Santo Domingo p. 30 **spp. n.**, SCHAUS t.c.

Callimorpha dominula brain p. 147 figs., BRETSCHNEIDER Jenaische Zs. Natw. **60.**

Carcinarctia xanthica p. 552, *kivuensis* p. 553, **spp. n.** Africa, JOICEY & TALBOT Bull. Hill Mus. **1.**

Carilephia **gen. n.** (near *Heliosia*) *moninna* **sp. n.** Philippines p. 24, SCHAUS Proc. U.S. Nat. Mus. **65** art. 7.

Caulocera aliba **sp. n.** Philippines p. 27, SCHAUS t.c.

Chamaita edelburga **sp. n.** Philippines p. 28, SCHAUS t.c.

Chionaema ochripicta **sp. n.** Tenimber p. 128, HULSTAERT Ann. Mag. N. H. (9) **13.**

Chlanidophora mariae **sp. n.** Argentina p. 14 figs., KÖHLER Fauna Argentina II.

Cisthene ducei **sp. n.** Colombia p. 22, SCHAUS Proc. U.S. Nat. Mus. **65** art. 7.

Cletis maculosa see *Arctia.*

Crambidia cinnica **sp. n.** Mexico p. 20, SCHAUS t.c.

Cyana puella **subsp. n.** *postflavida* Madagascar p. 308, ROTHSCHILD Ann. Mag. N. H. (9) **14.**

Cyclosiella pulchrina **sp. n.** Philippines p. 28, SCHAUS Proc. U.S. Nat. Mus. **65** art. 7.

Darantasia palladia Philippines, (*D.*?) *rumolda* Cuba, **spp. n.** p. 23, SCHAUS t.c.

Darantoides lineolata, plagiata **spp. n.** Dutch N. Guinea p. 86, HULSTAERT Ann. Soc. ent. Belg. **64.**

Deloplotela **gen. n.** *minuta* **sp. n.** Tenimber p. 132, HULSTAERT Ann. Mag. N. H. (9) **13.**

Diacrisia lubricipeda, lutea, history & varieties pp. 55–62, ADKIN Proc. S. London Ent. Soc. **1923–24.**

Diadesmola **gen. n.** *bicolor* **sp. n.** Dutch N. Guinea p. 88, HULSTAERT Ann. Soc. ent. Belg. **64.**

Dichrostoptera **gen. n** (near *Josiodes*) *basilinea* **sp. n.** Dutch N. Guinea p. 87, HULSTAERT t.c.

Disoidemata nicephora **sp. n.** Guatemala p. 20, SCHAUS Proc. U.S. Nat. Mus. **65** art. 7.

Ecpantheria nigriloba **sp. n.** Brazil p. 106, HULSTAERT Ann. Soc. ent. Belg. **64.**—*E. indecisa* **abb. n.** ♀ *confluens,* ♂ *candida* Argentina p. 13 figs., KÖHLER Fauna Argentina II.

Elysius cingulata **abb. n.** *deleta,* p. 106, *pauper* p. 107 Brazil, HULSTAERT Ann. Soc. ent. Belg. **64.**—*E. ruffin* Brazil p. 33, *macasia* Ecuador p. 34 **spp. n.**, SCHAUS Proc. U.S. Nat. Mus. **65** art. 7.

Eucharia casta **f. n.** *vittata* Bohemia p. 189, NIEPELT Intern. ent. Zs. **18.**

Eudoliche osvalda **sp. n.** Cuba p. 25, SCHAUS Proc. U.S. Nat. Mus. **65** art. 7.

Graphelysia transferred to Noctuidae pp. 146–147, FORBES Psyche **31.**

Hemipsilia grahami **sp. n.** China p. 28, SCHAUS Proc. U.S. Nat. Mus. **65** art. 7.

Idalus geertsi **sp. n.** Brazil p. 107, HULSTAERT Ann. Soc. ent. Belg. **64.**

Ilema rectiscissa, bitincta p. 307, *contempta* **spp. n.**, *kingdoni* **subsp. n.** *conspicua* p. 308 Madagascar, ROTHSCHILD Ann. Mag. N. H. (9) **14.**—*I. armogastes* **sp. n.** Philippines p. 20, SCHAUS Proc. U.S. Nat. Mus. **65** art. 7.

Illice bonitensis sp. n. Brazil p. 25, SCHAUS t.c.

Jorgensenia **gen. n.** *cunegunda* **sp. n.** Argentina p. 26, SCHAUS t.c.

Maenas parvula **sp. n.** New Guinea p. 134, HULSTAERT Ann. Mag. N. H. (9) **13.**—*M. fremantlei* **sp. n.** S. W. Australia p. 136, STRAND Iris **38.**

Miltochrista miniata **ab. n.** *deleta* Austria p. (193), HÖFER Verh. zool.-bot. Ges. Wien **73.**—*M. rothschildi* **n. n.** for *coccinea* Rothsch. (nec Moore) p. 131, HULSTAERT Ann. Mag. N. H. (9) **13.**—*M. gratiosa* **f. n.** *quelparta* Quelpart Island p. 144 fig., OKAMOTO Bull. Agric. Expt. Sta. Govt. Gen. Chosen **1.**

Neritos cucufas Br. Guiana p. 30, *cybar* Argentine p. 31 **spp. n.**, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Nola togatulalis life-history p. 167, BRUNN Intern. ent. Zs. **18.**—*N. breyeri* **sp. n.** Argentina p. 12 fig., KÖHLER Fauna Argentina II.

Nolinophanes **gen. n.** p. 132, *sicciaecolor* **sp. n.** Tenimber p. 133, HULSTAERT Ann. Mag. N. H. (9) **13.**

Ocnogyna mutabilis **sp. n.** p. 42, **f. n.** *mutata* p. 46 Tripoli figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Onymapata **n. n.** for *Stenocyttara* Hulst. (nec Turn.) p. 131, HULSTAERT Ann. Mag. N. H. (9) **13.**

Pachycerosia colmana **sp. n.** Philippines p. 22, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Paraona hampsoni, grahami **spp. n.** China p. 21, SCHAUS t.c.

Parasemia plantaginis **var.** *subalpina* **ab. n.** *impunctata* Austria p. (193), HÖFER Verh. zool.-bot. Ges. Wien **73.** —*P. plantaginis* **ab. n.** *aurantiaca* Dolomites p. 115, SCHAWERDA Mitt. Munchn. ent. Ges. **14.**

Parevia vulnaria **sp. n.** Brazil p. 31, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Pelochyta nabor **sp. n.** Peru p. 33, SCHAUS t.c.

Pericallia costimaculata **sp. n.** Africa p. 553, JOICEY & TALBOT Bull. Hill Mus. **1.**

Phryganopteryx feminina, saalmulleri **spp. n.** Madagascar p. 309, ROTHSCHILD Ann. Mag. N. H. (9) **14.**

Pisara tenella **sp. n.** Kei Is. p. 88, HULSTAERT Ann. Soc. ent. Belg. **64.**

Progona rioma Mexico p. 19, *ignata* Brazil p. 20, **spp. n.**, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Pseudoedaleosia **gen. n.** *scoparioides* **sp. n.** S. W. Australia p. 137, STRAND Iris **38.**

Rhyparioides metelkana early stages p. 204, GHIKA Intern. ent. Zs. **18.**

Schistophleps hedda **sp. n.** Philippines p. 27, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Siccia humilis **sp. n.** Madagascar p. 308, ROTHSCHILD Ann. Mag. N. H. (9) **14.**

Soritena **gen. n.** (near *Bertholdia*) *habanera* **sp. n.** Cuba p. 32, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Spilosoma menthastri **ab. n.** *drueti* Belgium p. 35, DERENNE Rev. mens. Soc. ent. Namur **24.**—*S. ummera* ♂ described Bangkok p. 232 fig., TAMS J. N. H. Soc. Siam **6.**

Stenocyttara Hulst. (nec Turn.) see *Onymapata.*

Talara thea **sp. n.** Ecuador p. 26, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Teracotona subflava p. 550, *pallida, multistrigata* p. 551, **spp. n.** Africa, JOICEY & TALBOT Bull. Hill Mus. **1.**

Thyone theodula **sp. n.** Guatemala p. 25, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Torycus domingonis **sp. n.** Santo Domingo p. 29, SCHAUS t.c.

Vulmara **gen. n.** (near *Halone*) *drostana* **sp. n.** Guatemala p. 24, SCHAUS t.c.

AGARISTIDAE.

Agarista agricola **subsp. n.** *laetior* New Guinea p. 134, HULSTAERT Ann. Mag. N. H. (9) **13.**

Heraclia barnsi **sp. n.** Africa p. 554, JOICEY & TALBOT Bull. Hill Mus. **1.**

Immetalia saturata diversa **ab. n.** *evanescens* Dutch N. Guinea p. 98, HULSTAERT Ann. Soc. ent. Belg. **64.**

Mimeusemia geraldi **subsp. n.** *angustata* Tanganyika p. 555, JOICEY & TALBOT Bull. Hill Mus. **1.**

NOCTUIDAE.

Revision of Noctuidae, DRAUDT in Seitz Fauna amer. **7** pp. 15–92.

Collecting of Noctuidae, HEINZEL Intern. ent. Zs. **18** p. 209.

Achaea lanipes **sp. n.** Kei Is. p. 114, HULSTAERT Ann. Mag. N. H. (9) **13.**—*A. pectinicornis* note p. 451, PROUT Bull. Hill Mus. **1.**

Acrapex postrosea **sp. n.** New Guinea p. 98, HULSTAERT Ann. Mag. N. H. (9) **13.**

Acronycta tridens **subsp. n.** *radoti*, Morocco p. 26, LE CERF Bull. Soc. ent. Fr. **1924**.—*A. pseudobamra*, *mediovittata* **spp. n.** Madagascar p. 312, ROTHSCHILD Ann. Mag. N. H. (9) **14**.

Adisura malagassica **sp. n.** Madagascar p. 310, ROTHSCHILD Ann. Mag. N. H. (9) **14**.

Aegle rebeli **sp. n.** Mesopotamia p. (159) fig., SCHAWERDA Verh. zool.-bot. Ges. Wien **73**.

Aglaonice otignatha **sp. n.** Guatemala p. 453, HAMPSON Ann. Mag. N. H. (9) **13**.

Agonista proutae **sp. n.** Philippines p. 109, HULSTAERT Ann. Mag. N. H. (9) **13**.

Agrotiphila lyngei **sp. n.** Novaya Zemlya p. 2 fig., REBEL Rept. Norw. Exp. Nov. Zeml. no. 7 1923.

Agrotis cuprea, distribution, biology, morphology pp. 41–42, 45–47, 49–51 fig., CORTI Schweizer ent. Anz. **3**; notes on, p. 166, BERGMANN Intern. ent. Zs. **17**.—*A. chardinyi* variation pp. 95–98, BOIS-REYMOND Zs. wiss. Insektenbiol. **19**.—*A. c-nigrum* **ab. n.** *nigrescens* Bulgaria p. 100, BURESCH Trav. Soc. bulg. Sci. nat. **7** 1915.—*A. manabilis* p. 57, *oblimata*, *heterochroma* p. 58 **spp. n.** Colombia, DRAUDT in Seitz Fauna amer. **7**.—*A. lucipeta* **abb. n.** *obscurior*, *pallida* Belgium p. 43, DRUET Rev. mens. Soc. ent. Namur **24**.—*A. orbona* **f. n.** *gredleri*, *stigmatica* **f. n.** *stigmatula*, *vestigialis* **f. n.** *olivacea* S. Tyrol p. 45, HARTIG Ent. Rdsch. **41**.—*A. yernauxi* **sp. n.** Kei Is. p. 89, HULSTAERT Ann. Soc. ent. Belg. **64**.—*A. pediciliata* **sp. n.** New Guinea p. 413 fig., PROUT Bull. Hill Mus. **1**.—*A. decora* **ab. n.** *flavomaculata* Dolomites p. 95, SCHAWERDA Mitt. Munchn. ent. Ges. **14**.—*A. augur* **ab. n.** *conjuncta* Poland p. 7, SCHILLE Polsk. Pismo ent. **3**.—*A. ocellina* early stages pp. 64–67, SCHULTZ Zs. wiss. Insektenbiol. **19**.—*A. latens* **ab. n.** *obscura* Carniola, *wiskotti* **abb. n.** *flavidior*, *deflavata* Austria p. (28), SCHWINGENSCHUSS Verh. zool.-bot. Ges. Wien **73**.—*A. subrosea* **f. n.** *decipiens* Hamburg p. 181, WARNECKE Intern. ent. Zs. **18**.

Amabela carsinodes **sp. n.** Trinidad p. 439, HAMPSON Ann. Mag. N. H. (9) **13**.

Anarta devagor **sp. n.** Siberia p. 45, KOZHANTSHIKOV Jahrb. Martjanov. Staatsm. Minussinsk **1** Lief. 1 1923.

Anartomorpha diaphana **sp. n.** Siberia p. 43, KOZHANTSHIKOV t.c.

Anepholcia **gen. n.** p. 401, *talboti* **sp. n.** Sumatra p. 402, *Trisuloides pygaria* transferred to, p. 403 figs., PROUT & TALBOT Bull. Hill Mus. **1**.

Anisoneura depressa **sp. n.** Kei Is. p. 122, HULSTAERT Ann. Mag. N H. (9) **13**.—*A. inermis* **sp. n.** Siam p. 243 figs., TAMS J. N. H. Soc. Siam **6**.

Anoba suffusa **sp. n.** Trinidad p. 429, HAMPSON Ann. Mag. N. H. (9) **13**.

Antiblemma eschata p. 437, *leucomochla*, *albizonea* p. 438, **spp. n.** Trinidad, HAMPSON t.c.

Anticarsia schausi **sp. n.** Arizona p. 16, BARNES & BENJAMIN Ent. News **35**.

Anua costiplaga **sp. n.** Kei Is. p. 113, HULSTAERT Ann. Mag. N. H. (9) **13**.

Anugana **gen. n.** p. 141, *limbatis* **sp. n.** p. 142 S. W. Australia, STRAND Iris **38**.

Apoxestia **gen. n.** type *ioglauca* Zerny Bolivia p. 85, DRAUDT in Seitz Fauna amer. **7**.

Athyrma rhynchophora p. 447, *eupepla* p. 448, **spp. n.** E. Indies figs., PROUT Bull. Hill Mus. **1**.

Athysania amianta **sp. n.** Br. Guiana p. 435, HAMPSON Ann. Mag. N. H. (9) **13**.

Barcita zaleodes **sp. n.** Trinidad p. 427, HAMPSON t.c.

Beana nitida **sp. n.** Siam p. 237 fig., TAMS J. N. H. Soc. Siam **6**.

Belciana kala p. 442, *particolor* p. 444, *habroscia*, *sophronia* p. 445, *subserrata* p. 446, **spp. n.** E. Indies figs., PROUT Bull. Hill Mus. **1**.

Bendisodes **gen. n.** *acygonia* **sp. n.** Trinidad p. 440, HAMPSON Ann. Mag. N. H. (9) **13**.

Bocana umbrina **sp. n.** Siam p. 260 fig., TAMS J. N. H. Soc. Siam **6**.—*B. orionalis* see *Coremagnatha*.

Brachyonycha nubeculosa **f. n.** *eugraphomena* Central Europe p. 157, STAUDER Ent. Anz. Vienna **4** 1924.

Brithys vertenteni **sp. n.** Dutch N. Guinea p. 89, HULSTAERT Ann. Soc. ent. Belg. **64.**

Callopistria latreillei **ab. n.** *anthracita* S. Dalmatia p. 82, WAGNER Iris **37** 1923.

Calophasia danieli **sp. n.** Morocco p. 26, LE CERF Bull. Soc. ent. Fr. **1924.**—*C. pintori* p. 76, *liberatii* p. 77, **spp. n.** Cyrenaica fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Calymnia pyralina **var. n.** *dannehli* S. Tyrol p. 46, HARTIG Ent. Rdsch. **41.**

Capnodes dorsilinea Dogn. (nec Dyar) see *Dolichosomastis leucogrammica.*

Carcharoda erlangeri Abyssinia, *splendida* Madagascar **spp. n.** p. 314, ROTHSCHILD Ann. Mag. N. H. (9) **14.**

Carea unipunctata **subsp. n.** *fulvida, longicornis* p. 417, *egens, trichotmeta* p. 418, *adoxa, phaedropa* p. 420, *semipallida* p. 421, *quieta* p. 422 Dutch E. Indies, *erectilinea* Perak p. 419, **spp. n.** figs., PROUT Bull. Hill Mus. **1.**

Carsina **gen. n.** for *Phurys obliqua* Moore p. 251, HAMPSON in TAMS J. N. H. Soc. Siam **6.**

Catephia arctipennis **sp. n.** Tenimber p. 123, HULSTAERT Ann. Mag. N. H. (9) **13.**—*C. rufostrigata* **subsp. n.** *glabripars* Buru p. 423, PROUT Bull. Hill Mus. **1.**

Catocala thomsoni p. 452, *jansseni* p. 453 China, *barnsi* Tanganyika **spp. n.**, *appollina* ♀ described Senegal p. 454 figs., PROUT Bull. Hill Mus. **1.**

Cerocala perorsorum (with **f. n.** *fulgens*) p. 101, *rothschildi* p. 110, **spp. n.** Cirenaica figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Cerynea pilipalpus **sp. n.** New Guinea, p. 99, HULSTAERT Ann. Mag. N. H. (9) **13.**

Cetola phaleroides **sp. n.** Madagascar p. 312, ROTHSCHILD Ann. Mag. N. H. (9) **14.**

Charadra nitens **f. n.** *jalapensis* Mexico p. 18, *deridens* **f. n.** *fumosa* Canada, *nigracreta* **ff. n.** *creta* Mexico, *triangulum* Costa Rica p. 19, DRAUDT in Seitz Fauna amer. **7.**

Checupa equifortis p. 413, *curvivena* p. 414, **spp. n.** Sumatra figs., PROUT Bull. Hill Mus. **1.**

Chloridea posttriphaena **sp. n.** Madagascar p. 310, ROTHSCHILD Ann. Mag. N. H. (9) **14.**—*C. peltigera* **f. n.** *clarissima* Cirenaica p. 101 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Chorizagrotis benefida **sp. n.** Ecuador p. 51, DRAUDT in Seitz Fauna amer. **7.**

Cirrodes rosaceus **sp. n.** Abyssinia p. 314, ROTHSCHILD Ann. Mag. N. H. (9) **14.**

Clethrophora angulipennis p. 432, *gonophora* p. 433, **spp. n.** Sumatra figs., PROUT Bull. Hill Mus. **1.**

Coremagnatha **gen. n.** type *Bocana orionalis* p. 445, *cyanocraspis* **sp. n.** Trinidad p. 446, HAMPSON Ann. Mag. N. H. (9) **13.**

Cosmophila synonymy, keys p. 20, figs., TAMS Trans. Ent. Soc. **1924.**

Cretonia brevioripalpus **sp. n.** Tenimber p. 101, HULSTAERT Ann. Mag. N. H. (9) **13.**

Crino letheus p. 87, *leptitanus* p. 88, *nasamonius* p. 90, **spp. n.** Cirenaica figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Cucullia cemenelensis **sp. n.** Nice-Cimiez p. 315 fig., BOURSIN Ann. Soc. ent. Fr. **92** 1923.

Cyclopteryx laniata **sp. n.** Trinidad p. 432, HAMPSON Ann. Mag. N. H. (9) **13.**

Dermaleipa joiceyi **sp. n.** Sumatra p. 438 fig., PROUT Bull. Hill Mus. **1.**

Derthisa lederi **f. n.** *rosea* Berca p. 80, TURATI Atti Soc. ital. Sci. nat. **63.**

Dianthoecia capsincola, larval biology pp. 315–317, CALAND Ent. Ber. **6.**—*D. gedrensis* **sp. n.** Pyrenees p. 26, SCHAWERDA Mitt. Munchn. ent. Ges. **14.**

Diomyx psectrocera **sp. n.** Trinidad p. 428, HAMPSON Ann. Mag. N. H. (9) **13.**

Dipthera androdes p. 439, *tamsi, leucotaenia* p. 440, **spp. n.** E. Indies figs., PROUT Bull. Hill Mus. **1.**

Disepholcia **gen. n.** for *Trisuloides caerulea* p. 404 figs., PROUT & TALBOT Bull. Hill Mus. **1.**

Dolichosomastis **gen. n.**, *leucogrammica* **n. n.** for *Capnodes dorsilinea* Dogn. (nec Dyar) Trinidad p. 436, HAMPSON Ann. Mag. N. H. (9) **13.**

Dysocnemis belladonna Hy. Edw. (= *anartoides*, Strand) p. 249, MCDUNNOUGH Can. Ent. **56.**

Ectopatria distincta p. 138, *dimidiata, contrasta* p. 139, **spp. n.** S. W. Australia, STRAND Iris **38.**

Entomogramma falcata **sp. n.** Tenimber p. 110, HULSTAERT Ann. Mag. N. H. (9) **13.**

Eopaectes **gen. n.** p. 104, *albomacula* **sp. n.** Tenimber p. 105, HULSTAERT Ann. Mag. N. H. (9) **13.**

Ephesia nagioides **n. n.** for *sancta* Butler p. 287, WILEMAN Entomologist **57.**

Epia jola **sp. n.** Utah p. 12, BARNES & BENJAMIN Ent. News **35.**

Epipsilia amphipyroides p. 63, *leucanidia, plectistriga, livescens* p. 66, *centripuncta* p. 67 **spp. n.**, *pyronota* **f. n.** *derufata* p. 66 S. America, DRAUDT in Seitz Fauna amer. **7.**

Episema glaucina **f. n.** *teriolensis* S. Tyrol p. 45, HARTIG Ent. Rdsch. **41.**—*E. glaucina meridionalis* **ab. n.** *griseoviolacea* S. Dalmatia p. 82, WAGNER Iris **37** 1923.

Erastria trabealis **ff. n.** *nigricostata, crassistriga* Alps, **subsp. n.** *sheljuzhkoi* Russia p. 110, STAUDER Ent. Anz. **4.**

Erebus speciosus **sp. n.** Kei Is. p. 91, HULSTAERT Ann. Soc. ent. Belg. **64.**

Eriopus violascens, rufulus **spp. n.** Madagascar p. 311, ROTHSCHILD Ann. Mag. N. H. (9) **14.**

Erygia apicalis **subsp. n.** *tamsi* Kei Is. p. 123, HULSTAERT Ann. Mag. N. H. (9) **13.**

Eublemma insignifica, tephroclytioides p. 315, *subrufula, rufocastanea, postrufa* p. 316, **spp. n.** Madagascar, ROTHSCHILD Ann. Mag. N. H. (9) **45.**

Eudryas madagascariensis **sp. n.** Madagascar p. 313, ROTHSCHILD t.c.

Eugorna alboarcuata Beth.-Baker see *Heoeugorna.*

Eumaenas **n. n.** for *Maenas* Hb. Verz. bek. Schmett p. 264 (1825) nec p. 167, p. 252, HAMPSON in TAMS J. N. H. Soc. Siam **6.**—*E. salaminia* **subsp. n.** *nigricilia* New Guinea p. 449, PROUT Bull. Hill Mus. **1.**

Eustrotia brunneicolor **sp. n.** New Guinea p. 102, HULSTAERT Ann. Mag. Mag. N. H. (9) **13.**

Eutrinita **gen. n.** p. 451, type *ferruginea* **sp. n.** Trinidad p. 452, HAMPSON Ann. Mag. N. H. (9) **13.**

Euxoa schausi **sp. n.** Costa Rica, *araucaria* **f. n.** *argentina* p. 36, *senta, conifrons* **spp. n.** p. 48 S. America, DRAUDT in Seitz Fauna amer. **7.**—*E. glaucina* p, 31, *arenacea* p. 32, **spp. n.** Siberia, KOZHANTSCHIKOV Jahrb. Martjanov. Staatsm. Minussinsk **1** Lief. 1 1923.—*E. fulva* p. 59, *silvestrii* p. 62, *securifera* p. 69 **spp. n.**, *hoggari* **f. n.** *minima* p. 62; *segetum* **ff. n.** *minorata, pseudocos* p. 61; *trux* **ff. n.** *pseudolunigera, conclamationis* p. 71 Cirenaica figs., TURATI Atti Soc. ital. Sci. nat. **63.**—*E. polybela* see *Omphaloscelis.*

Fodina sumatrensis **sp. n.** Sumatra p. 425 figs., PROUT Bull. Hill Mus. **1.**

Gadirtha albovenosa **sp. n.** New Guinea p. 429 fig., PROUT t.c.

Glympis subterminalis **sp. n.** Trinidad p. 435, HAMPSON Ann. Mag. N. H. (9) **13.**

Gonoglasa **gen. n.** *camptogramma* **sp. n.** Borneo p. 250 fig., HAMPSON in TAMS J. N. H. Soc. Siam **6.**

Gracillina **gen. n.** *prosthenia* **sp. n.** Singapore p. 182, HAMPSON Entomologist **57.**

Graphelysia a Noctuid and not an Arctiid pp. 146–147, FORBES Psyche **31.**

Gyrtona elongata **sp. n.** Philippines p. 106, HULSTAERT Ann. Mag. N. H. (9) **13.**

Gyrtothripa simplex **sp. n.** Tenimber p. 90, HULSTAERT Ann. Soc. ent. Belg. **64.**

Hadena maillardi **ab. n.** *infuscata* Austria p. (29), SCHWINGENSCHUSS Verh. zool.-bot. Ges. Wien **73.**

Hadennia umbrina **sp. n.** Bangkok p. 261 fig., TAMS J. N. H. Soc. Siam **6.**

Haemabasis (?) *pulchrifascia* **sp. n.** Dutch N. Guinea p. 92, HULSTAERT Ann. Soc. ent. Belg. **64.**

Hamodes cochlearifer **sp. n.** Kei Is. p. 124, HULSTAERT Ann. Mag. N. H. (9) **13.**

Helia cymansis **sp. n.** Panama p. 433, HAMPSON Ann. Mag. N. H. (9) **13.**

Hemeroplanis finitima **race n.** *concoloralis* California p. 16, BARNES & BENJAMIN Ent. News **35.**

Heoeugorna **gen. n.** for *Eugorna alboarcuata* Beth.-Baker p. 254, HAMPSON in TAMS J. N. H. Soc. Siam **6.**

Herminia tentacularia **ab. n.** *romaniszyni* Poland p. 92, KAUCKI Polsk. Pismo ent. **3.**

Hirsutipes excisa **sp. n.** New Guinea p. 126, HULSTAERT Ann. Mag. N. H. (9) **13.**

Hyblaea castanea **sp. n.** Siam p. 262 fig., TAMS J. N. H. Soc. Siam **6.**

Hydrilla kitti **ab. n.** *griseomixta* Salzburg p. 48, SCHULTZ Ent. Zs. **37.**

Hypena demeysti Kei Is. p 96, *haplochrosta* Tenimber p 97, **spp. n.,** HULSTAERT Ann. Soc. ent. Belg. **64.**—*H. allochroalis* **sp. n.** Bangkok p. 258 fig., TAMS J. N. H. Soc. Siam **6.**

Hyperlopha cristifera **subsp. n.** *orientalis* Kei Is. p. 126, HULSTAERT Ann. Mag. N. H. (9) **13.**

Hyssia marloffi **sp. n.** New Mexico p. 13, BARNES & BENJAMIN Ent. News **35.**

Ichneutica dives **sp. n.** N. Zealand p. 207, PHILPOTT Trans. N. Z. Inst. **55.**

Labanda affinis (with **ab. n.** *torniflora*) **sp. n.** Tenimber p. 109, HULSTAERT Ann. Mag. N. H. (9) **13.**

Leucanitis stolida **ab. n.** *incompleta* Bulgaria p. 100, BURESCH Trav. Soc. bulg. Sci. nat. **7** 1915.

Leucochlaena machylum **sp. n.** p. 78, **f.n.** *luteosignata* p. 80 Cyrenaica figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Leucovis latifascia **sp. n.** B. E. Afr. p. 315, ROTHSCHILD Ann. Mag. N. H. (9) **14.**

Libyana **gen. n.** *marmarides* **sp. n.** Cyrenaica p. 93 figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Lichnoptera cavillator **ff.n.** *flavescens, reducta ; albidiscata* **ff.n.** *albidior, flavescens* America (Central & South) p. 20, DRAUDT in Seitz Fauna amer. **7.**

Lithacodia xemiloca **sp. n.** Mexico p. 16, DYAR Ins. Insc. Mens. **12.**

Lobotorna **gen. n.** p. 444, *albapex* **sp. n.** Panama p. 445, HAMPSON Ann. Mag. N. H. (9) **13.**

Lois **gen. n.** *monoflex* **sp. n.** Mexico p. 16, DYAR Ins. Insc. Mens. **12.**

Lophodelta **gen. n.** key p. 448, type *argyrolepia* Peru, *goniograpta* Guatemala p. 449, *peratostriga* Brazil, *minima* Panama p. 450, *dinemata* Trinidad p. 451, **spp. n.,** HAMPSON Ann. Mag. N. H. (9) **13.**

Lycophotia molitrix Costa Rica, *striolata, fuscicosta* p. 70, *calvescens, bipuncta, crassipuncta, spurgata* **spp. n.** ; *ferruginescens* **f. n.** *brunnea* p. 71, *figulina* **sp. n.** p. 68 S. America, DRAUDT in Seitz Fauna amer. **7.**—*L. haruspex* **sp. n.** Morocco p. 147, LE CERF Bull. Soc. ent. Fr. **1924.**

Maenas Hb. see *Eumaenas.*

Mamestra cavernosa **ab. n.** *dilutior* Austria p. (29), SCHWINGENSCHUSS Verh. zool.-bot. Ges. Wien **73.**

Mania maura **ab. n.** *ojcoviensis* Poland p. 241 fig., BIEZANKO Arch. Natg. **90** A 5.

Meizoglossa **gen. n.** *bipunctata* **sp. n.** Tenimber p. 100, HULSTAERT Ann. Mag. N. H. (9) **13.**

Melanchra distracta **sp. n.** N. Zealand p. 202, MEYRICK Trans. N. Z. Inst. **55.**—*M. furtiva* **sp. n.** N. Zealand p. 663 fig., PHILPOTT Trans. N. Z. Inst. **55.**

Melicleptria stramineipicta p. 140, *bipartita* p. 141, **spp. n.** S.W. Australia, STRAND Iris **38.**

Melipotis dubia **ab. n.** *apicalis* Kei Is. p. 114, HULSTAERT Ann. Mag. N. H. (9) **13.**

Mesembreosa **gen. n.** *albatra* **sp. n.** Tenimber p. 103, HULSTAERT t.c.

Meropleon **gen. n.** *cosmion* **sp. n.** Louisiana p. 21, DYAR Ins. Insc. Mens. **12**; larva pp. 469–472 fig., BYNUM & HOLLOWAY Ann. Ent. Soc. Amer. **17.**

Metachrostis muscicolor **sp. n.** Siberia p. 28, KOZHANTSHIKOV Jahrb. Martjanov. Staatsm. **1** Lief. 1 1923.—*M. raptricula* **ff. n.** *marmorata, sarrothrypoides* p. 53, *basimaculata, alboscapulata, dilutata, trisignata, degenerata* p. 54, *acceptricula, variegatula* p. 55; *rutilans* p. 55 (with **f. n.** *albosignata* p. 56) *syrticola* p. 56 (with **f. n.** *trapezoidalis*), **spp. n.** Cyrenaica figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Metalectra diabolica **sp. n.** Texas p. 17 BARNES & BENJAMIN Ent. News **35.**

Metopoceras bubaceki **sp. n.** Spain p. (25) fig., SCHAWERDA Verh. zool.-bot. Ges. Wien **73.**

Micrapatetis tripartita **ab. n.** *decipiens* Tenimber p. 103, HULSTAERT Ann. Mag. N. H. (9) **13.**

Mimerastria mandschuriana **f. n.** *tzygankovi* Siberia p. 68, KOZHANTSHIKOV Jahrb. Martjanov. Staatsmus. **2** Lief. 1.

Nagia godfreyi **sp. n.** Siam p. 246 figs., TAMS J. N. H. Soc. Siam **6.**

Nephelistis schedogymnopis **sp. n.** Mexico p. 15, DYAR Ins. Insc. Mens. **12.**

Nyctipao albiangulata, meforensis **spp. n.** East Indies p. 435 figs., PROUT Bull. Hill Mus. **1.**

Obroatis rhodocraspis **sp. n.** Trinidad p. 441, HAMPSON Ann. Mag. N. H. (9) **13.**

Omphaloscelis, Euxoa polybela referred to pp. 20–22 fig., CORTI Schweizer ent. Anz. **3.**—*O. teukyrana* **sp. n.** (with **f. n.** *adusta*) Cirenaica p. 86 figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Oroscopa diascia p. 442, *microdonta* p. 443, **spp. n.** Trinidad, HAMPSON Ann. Mag. N. H. (9) **13.**

Orsa deleta **sp. n.** Trinidad p. 432, HAMPSON t.c.

Orthosia humilis **abb. n.** *rufescens* p. (193), *nigromaculata* p. (194) Austria fig., HÖFER Verh. zool.-bot. Ges. Wien **73.**

Osdara albicosta **sp. n.** Panama p. 430, HAMPSON Ann. Mag. N. H. (9) **13.**

Oxidercia nigrirena **sp. n.** Trinidad p. 431, HAMPSON t.c.

Oxytrypia orbiculosa life history p. 193, GHIKA Intern. ent. Zs. **18**; **var. n.** *ussurica* Siberia p. (89), SCHAWERDA Verh. zool.-bot. Ges. Wien **73.**

Ozarba (*Acontiola*) *moldavicula* **var. n.** *mesopotamica* Mesopotamia p. (160) fig., SCHAWERDA Verh. zool.-bot. Ges. Wien **73.**

Pangrapta talusalis ♂ described Bangkok p. 255, TAMS J. N. H. Soc. Siam **6.**

Panolis flammea biology pp. 313–326 fig., ECKSTEIN Zs. angew. Ent. **10**; parasites p. 183, HABERMEHL D. ent. Zs. **1924**; pupa pp. 93, 121, KRAUSSE Intern. ent. Zs. **18.**

Parallelia prouti p. 115, *cuneifascia* Kei, *missionarii* p. 117, *fallax* (with **subsp. n.** *septentrionis* Kei p. 119) p. 118 Tenimber **spp. n.**, HULSTAERT Ann. Mag. N. H. (9) **13.**

Paratuerta abrupta **sp. n.** B. E. Afr. p. 315, ROTHSCHILD Ann. Mag. N. H. (9) **14.**

Paromia rufifuscalis **sp. n.** Trinidad p. 447, HAMPSON Ann. Mag. N. H. (9) **13.**

Pericyma cruegeri **abb. n.** *albilinea, alba, pallida* Dutch New Guinea p. 120, HULSTAERT Ann. Mag. N. H. (9) **13.**

Perigea gurrha **sp. n.** Mexico p. 15, DYAR Ins. Insc. Mens. **12.**

Persectania marmorata **sp. n.** N. Zealand p. 7, HUDSON Ent. Mo. Mag. **60.**—*P. similis* **sp. n.** N. Zealand p. 207, PHILPOTT Trans. N. Z. Inst. **55.**

Phoenicophanta modestula **sp. n.** Mexico p. 16, DYAR Ins. Insc. Mens. **12.**

Phurys obliqua Moore see *Carsina.*

Phyllodes diversipalpus **sp. n.** New Guinea p. 437, PROUT Bull. Hill Mus. **1.**

Phytometra ornata **f. n.** *contacta* Siberia p. 48, KOZHANTSHIKOV Jahrb. Martjanov. Staatsm. Minussinsk **1** Lief. **1** 1923.

Pleurona ochrolutea **sp. n.** Kei Islands p. 93, HULSTAERT Ann. Soc. ent. Belg. **64.**

Plusia chalcytula **sp. n.** Tenimber p. 122, HULSTAERT Ann. Mag. N. H. (9) **13.**

Polia nimbosa Guen. (= race *mystica* Smith) p. 7, **race n.** *mysticoides* Vancouver Island p. 7, BARNES & BENJAMIN Ent. News **35.**—*P. rufocincta* **ff. n.** *intermedia, caerulescens* S. Tyrol p. 46, HARTIG Ent. Rdsch. **41.**

Porosagrotis peruviana **f. n.** *hampsoni* Peru p. 35, DRAUDT in Seitz Fauna amer. **7.**

Porphyrinia albida **var. n.** *peralba* Mesopotamia p. (159) fig., SCHAWERDA Verh. zool.-bot. Ges. Wien **73.**—*P. cyrenaea* **sp. n.** p. 101, *parva* **f. n.** *latescens*; *albida* **f. n.** *ochreola* p. 103 Cyrenaica fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Powellinia lasserrei **f. n.** *ptolemaida* p. 58, *matritensis* **f. n.** *bercana* p. 59 Cyrenaica figs. TURATI t. c.

Prodenia eridania Cram. (partim.) synonymy p. 102, BARNES & BENJAMIN Ent. News **35.**

Pseudbarydia **gen. n.** type *Barydia japeta* Cram. p. 425, *peratopis* **sp. n.** Venezuela p. 426, HAMPSON Ann. Mag. N. H. (9) **13.**

Pseudopolia **gen. n.** *aurora* **sp. n.** Cyrenaica p. 84 figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Radinogoës v-parvum **sp. n.** Siberia p. 40, KOZHANTSHIKOV Jahrb. Martjanov. Staatsm. **1** Lief. I 1923.

Renia nebulosa **sp. n.** Trinidad p. 447, HAMPSON Ann. Mag. N. H. (9) **13.**

Renodes hypomelas **sp. n.** Trinidad p. 434, HAMPSON t.c.

Rhizagrotis ebenea U.S.A., *triclava* p. 51, *tolimae* Columbia, *irazuna* p. 53, *gracilior* p. 52 Central Amer., **spp. n.,** DRAUDT in Seitz Fauna amer. **7.**

Rhyacia reticulata **sp. n.** Siberia p. 35, KOZHANTSHIKOV Jahrb. Martjanov. Staatsm. **1** Lief. 1 1923.—*R. albifurca* (= *reticulata* Kozhant.) p. 75, KOZHANTSHIKOV op. cit. **2** Lief. 1.—*R. orbona* **ff. n.** *robusta, olivacea* p. 72 figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Risoba ocellata Sumatra p. 415, *sticticata* p. 430, *diphtheropsis* p. 431, **spp. n.** Dutch New Guinea figs., PROUT Bull. Hill Mus. **1.**

Rivula concolor **sp. n.** Tenimber p. 104, HULSTAERT Ann. Mag. N. H. (9) **13.**

Saroba cinctipalpis **sp. n.** Tenimber p. 126, HULSTAERT Ann. Mag. N. H. (9) **13.**

Selepa acervata **sp. n.** Tenimber p. 108, HULSTAERT t.c.

Serrodes mediopallens **sp. n.** New Guinea p. 447 fig., PROUT Bull. Hill Mus. **1.**

Sidemia? püngeleri **sp. n.** Siberia p. (89) fig., SCHAWERDA Verh. zool.-bot. Ges. Wien **73.**

Sideridis codyi **sp. n.** N. S. Wales p. 98, HULSTAERT Ann. Mag. N. H. (9) **13.**

Smilepholcia **gen. n.** for *Trisuloides luteifascia* Hamps. p. 406 figs., PROUT & TALBOT Bull. Hill Mus. **1.**

Speiredonia biformis (with **subsp. n.** *tenimberensis* Tenimber p. 113) **sp. n.** Kei Is. p. 112, HULSTAERT Ann. Mag. N. H. (9) **13.**—*S. euphrages* **sp. n.** New Guinea p. 436 figs., PROUT Bull. Hill Mus. **1.**

Stenosoma **gen. n.,** *synesia* **sp. n.** Cirenaica p. 74 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Stibaera curvilineata **n. n.** for *S. costiplaga* Druce (nec Wlk.) Mexico p. 427, HAMPSON Ann. Mag. N. H. (9) **13.**

Stictoptera polysticta p. 427, *bakeri* p. 428, **spp. n.** New Guinea figs., PROUT Bull. Hill Mus. **1.**

Stilbia bongiovannii **sp. n.** Cyrenaica p. 98 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Stilbina mirabilis **sp. n.** Cyrenaica p. 95 figs., TURATI t.c.

Sympistis key to N. American and Greenland spp. p. 214, *wilsoni* **sp. n.** Br. Columbia p. 213, BARNES & BENJAMIN Can. Ent. **56.**

Syneda athabasca **race n.** *crokeri* Canada p. 15, BARNES & BENJAMIN Ent. News **35.**

Sypna lucilloides **sp. n.** New Guinea p. 441 fig., PROUT Bull. Hill Mus. **1.**

Tapinostola bondii **ab. n.** *impura* Austria p. (28), SCHWINGENSCHUSS Verh. zool.-bot. Ges. Wien **73.**

Tarache (*Acontia*) *lucida* **var. n.** *heliodora* Mesopotamia p. (160) fig., SCHAWERDA Verh. zool.-bot. ges. Wien **73.**

Thalpochares parva **ab. n.** *fumosa* S. Dalmatia p. 82, WAGNER Iris **37** 1923.

Thriponea **gen. n.** *muricata* **sp. n.** Philippines p. 107, HULSTAERT Ann. Mag. N. H. (9) **13.**

Thysania pomponia **sp. n.** Brazil p. xvi, JORDAN Trans. Ent. Soc. London **1924.**

Tozocampa costimacula **subsp. n.** *avisignata* Sumatra p. 425, PROUT Bull. Hill Mus. **1.**

Trapezoptera **gen. n.** *lobata* **sp. n.** Kei Is. p. 95, HULSTAERT Ann. Soc. ent. Belg. **64.**

Triphaena pronuba aberration p. 49 fig., HOLFORD Entomologist **57.**

Trisuloides revision p. 400, *sericea* **subsp. n.** *hawkeri* Buru p. 405 fig., *caerulea* see *Disepholcia, pygaria* see *Anepholcia, luteifascia* see *Smilepholcia,* PROUT & TALBOT Bull. Hill Mus. **1.**

Ugia sundana **sp. n.** Java p. 253 fig., HAMPSON in TAMS J. N. H. Soc. Siam **6.**

Varicosia **gen. n.** *venata* **sp. n.** Ceylon p. 183, HAMPSON Entomologist **57.**

Xylina lambda var. *zinckenii* **f. n.** *sericata* Belgium p. 44, CANDÈZE Bull. Soc. ent. Belg. **6.**

Xylocampa areola notes p. 201, ZUKOWSKY Intern. ent. Zs. **17.**

SPHINGIDAE.

Sphingidae in the Glatz district, STEPHAN Iris **38** p. 13.

Celerio euphorbiae **abb. n.** *rudolfi, griseonympha, caecigena* Halle p. 3, BANDERMANN Intern. ent. Zs. **18**; **subsp. n.** *strasillai* Italy p. 38, STAUDER Soc. ent. **39**; **hybr.** (? **ab.**) **n.** *silesiana,* **hybr.** (? **ab. n.**) *canarina* p. 29 no locality, WLADASCH N. Beitr. syst. Ins. **3**; **ab. n.** *nigerrima* Passau p. 143, SÄLZL Mitt. Munchn. ent. Ges. **14**; transformation of albuminous matter during metamorphoses pp. 1360–1361, HELLER C.R. Soc. Biol. **90.**

Cocytius misionum **sp. n.** Argentina p. 5 fig., KÖHLER Fauna argentina II.

Deilephila euphorbiae see *Celerio.*

Haemorrhagia (*Hemaris*), nomenclature of some spp. pp. 113–116 WAHLGREN Ent. Tidsk. **45**

Hemaris fuciformis, tityus discussed pp. 23–33, NIESIOLOWSKI Polsk. Pismo ent. **3.**

Hemeroplanes bréthesi **sp. n.** Argentina p. 9 fig., KÖHLER Fauna argentina II.

Hyloicus gerhardi **sp. n.** Nevada p. 166, BARNES & BENJAMIN Proc. Ent. Soc. Wash. **26.**

Kloneus babayaga synonymy p. 229, SKINNER Ent. News **35.**

Macroglossa stellatarum migratory flight p. 1, POWELL Etudes Lep. **22** pt. **1.**

Marumba saishiuana **sp. n.** Quelpart Island p. 96 fig., OKAMOTO Bull. Agric. Expt. Sta. Govt. Gen. Chosen **1.**

Megacorma obliqua **subsp. n.** *remota* Solomon & Bismarck Is. p. 298, JORDAN Nov. zool. **31.**

Meganoton clossi **sp. n.** N. Borneo p. 145 fig., GEHLEN Intern. ent. Zs. **18.**

Perigonia subaurea **sp. n.** Argentina p. 9 fig., KÖHLER Fauna argentina II.

Pholus translineatus anatomy p. 173, GEHLEN Intern. ent. Zs. **18.**

Polyptychus rosea, boisduvali, larva described p. 185, FLEURY Bull. Soc. ent. Fr. **1924.**

Protoparce breyeri **sp. n.** Argentina p. 6 fig., KÖHLER Fauna argentina II.

Smerinthus ocellatus second generation p. 152, BELLING D. ent. Zs. **1924.**

THYATIRIDAE.

Cymatophora duplaris **var. n.** *brabantia* Belgium p. 56, DERENNE Rev. mens. Soc. ent. Namur **24.**

Polyploca flavicornis **ab. n.** *medionigra* Austria p. (193), HÖFER Verh. zool.-bot. Ges. Wien **73.**—*P. hoerburgeri* **sp. n.** Siberia p. (90) fig., SCHAWERDA Verh. zool.-bot. Ges. Wien **73.**

EUPTEROTIDAE.

Apatelodes olaus p. 40, *schreiteri* p. 41, **spp. n.** Argentina, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Colobata thea **sp. n.** Argentina p. 42, SCHAUS t.c.

Olceclostera friburgensis **sp. n.** Brazil p. 41, SCHAUS t.c.

Phasicnecus pellucida, pulverulentus **spp. n.** Africa p. 559, JOICEY & TALBOT Bull. Hill Mus. **1.**

NOTODONTIDAE.

Andraca Wlk., transferred to Notodontidae from Bombycidae p. 177, ROEPKE Tijd. Ent. **67**.

Antiopha pittieri **sp. n.** Venezuela p. 57, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Bahaia **gen. n.** *sceletaria* **sp. n.** Mexico p. 17, DYAR Ins. Insc. Mens. **12**.

Cerura xicona **sp. n.** Mexico p. 17, DYAR t.c.—*C. titus* **sp. n.** Argentina p. 24 figs., KÖHLER Fauna argentina II.—*C. furcula* **subspp. n.** *salicis, betulae* Germany p. 44, LENZ Ent. Zs. **37**.

Cnethocampa pityocampa, pinivora, head structure pp. 460–463, PRELL Zs. angew. Ent. **10**.

Dicentria manni **sp. n.** Bolivia p. 57, SCHAUS Proc. U.S. Nat. Mus. **65** art. 7.

Elymiotis plechelm **sp. n.** Peru p. 56, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Epanaphe candèzei p. 399, *maynéi* p. 400, *nigripicta* p. 401, *unifascia* p. 402, **spp. n.** Belgian Congo, HULSTAERT Rev. zool. afr. **12**.

Exaereta giacomelli **sp. n.** Argentina p. 24 fig., KÖHLER Fauna argentina II.

Hemiceras cadoca **sp. n.** Brazil p. 59, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Notodonta phoebe in Pomerania, notes p. 21, ULE Ent. Rdsch. **41**.

Paradrallia punctigera **sp. n.** Belgian Congo, p. 398, HULSTAERT Rev. zool. afr. **12**.

Phalera bucephala **abb. n.** *paupercula, nanula,* Glatzer Mts. p. 44, STEPHAN Ent. Zs. **37**.

Rifargia cinga **sp. n.** Br. Guiana p. 58, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Thaumetopoea herculeana **f. n.** *carneades* Cirenaica p. 49 figs., TURATI Atti Soc. ital. Sci. nat. **63**.—*T. processionea* life history p. 174, ARNOLD Intern. ent. Zs. **18**.

GEOMETRIDAE.

Some Geometrids of the Alpes-Maritimes, BOURSIN Bull. Soc. ent. Fr. **1924** p. 24.

Notes on the biology of Geometridae, SCHNEIDER Intern. ent. Zs. **17** 1924 pp. 159–160.

Abraxas grossulariata somatic mosaic p. 17 figs., COCKAYNE Ent. Rec. **36**.

Acidalia muricata notes p. 53, GAUCKLER Ent. Zs. **37**.—*A. nexata* **var. n.** *marambaudista* Morocco p. 78, LUCAS Bull. Soc. ent. Fr. **1924**.—*A. imitaria* **f. n.** *rosea* Cyrenaica p. 113 fig., TURATI Atti Soc. ital. Sci. nat. **63**.

Aeolochroma venia, chioneschatia **spp. n.** E. Indies p. 458 figs., PROUT Bull. Hill Mus. **1**.

Akropapta **gen. n.** ? see *Bapta perapicata.*

Anisozyga extravagans p. 461, *polyglena* p. 462, **spp. n.** E. Indies figs., PROUT Bull. Hill Mus. **1**.

Asthena melanosticta **sp. n.** S. China p. 134 fig., WEHRLI Mitt. Munchn. ent. Ges. **14**.

Bapta perapicata **sp. n.** (**gen. n.** ? *Akropapta*) S. China p. 136 fig., WEHRLI t.c.

Baptria tibiale **f. n.** *kauckii* Carpathians p. 47 fig., SCHILLE N. Beitr. syst. Ins. **3**.

Biston, aetiology and structure p. 1, MEISENHEIMER Zool. Jahrb. Abt. Algem. **41**.

Boarmia pseudopunctinalis **sp. n.** E. China p. 74 fig., WEHRLI Iris **37** 1923.—*B. postcandida* p. 139, *xanthypochlora, tetraspilaria* p. 140, **spp. n.** S. China figs., WEHRLI Mitt. Munchn. ent .Ges. **14**.

Bordeta bursadoides **ab. n.** *deannulata* E. Indies p. 473, PROUT Bull. Hill Mus. **1**.

Callipotnia allognata **subsp. n.** *incerta* E. Indies p. 457, PROUT t.c.

Calostigia stilpna **sp. n.** France p. 481, PROUT t.c.

Chlorissa draudti **sp. n.** Egypt p. 70, ANDRES & SEITZ Senckenb. **6**.

Cidaria (*Larentia*) *mosulensis* **sp. n.** Mesopotamia p. (160) fig., SCHAWERDA Verh. zool.-bot. Ges. Wien **73**.—*C. euthygramma* **sp. n.** S. China p. 131 fig., WEHRLI Mitt. Munchn. ent. Ges. **14**.—*C. aptata* **ff. n.** *hesperina* p. 77, *jurahelvetica* p. 78 Alps, WEHRLI Iris **38**.

Coenocharis utahensis Utah p. 30, *tucsonensis* Arizona p. 32, **spp. n.** figs., CASSINO & SWETT Lepidopterist **4**.

Coenotephria homophana **subsp. n.** *petri* Bokhara p. 482, PROUT Bull. Hill Mus. **1.**

Cosymbia piazzaria **sp. n.** California & Arizona p. 94, WRIGHT Ent. News **35.**

Craspedosis iniquisecta, flavidistata p. 471, *effusa* p. 472 **spp. n.**, *uniplaga* **subsp. n.** *angustiplaga ; galathea* **subsp. n.** *weylandensis* p. 473 E. Indies figs., PROUT Bull. Hill Mus. **1.**

Cryptoloba perpusilla p. 132, *erubescens* p. 133 **spp. n.** S. China figs., WEHRLI Mitt. Munchn. ent. Ges. **14.**

Ctimene tenebricosa **sp. n.** E. Indies p. 475 fig., PROUT Bull. Hill Mus. **1.**

Dalima hönei **sp. n.** E. China p. 68 fig., WEHRLI Iris **37** 1923.

Devarodes prouti **sp. n.** Brazil p 108, HULSTAERT Ann. Soc. ent. Belg. **64.**

Dioscore ancyla **sp. n.** E. Indies p. 460, fig., PROUT Bull. Hill Mus. **1.**

Egea lysimeles **sp. n.** Central Altai p. 478, PROUT t.c.

Ematurga atomaria **ab. n.** *latelineata* Poland p. 242 fig., BIEŻANKO Arch. Natg. **90** A 5.

Epione apiciaria **ab. n.** *aurantiaca* Moravia p. (5), REBEL Verh. zool.-bot. Ges. Wien **73.**

Epirranthus pulverata **ab. n.** *fasciata* Regensburg p. 143, SÄLZL Mitt. Munchn. ent. Ges. **14.**

Eucharia casta **f. n.** *sibirica* p. 68, KOZHANTSHIKOV Jahrb. Martjanov. Staatsmus **2** Lief. 1.

Eucharidema apora **subsp. n.** *plesiozona* E. Indies p. 474 fig., PROUT Bull. Hill Mus. **1.**

Eucosmia certata **ab. n.** *rebeli* Austria p. (108), NITSCHE Verh. zool.-bot Ges. Wien **73.**

Eupithecia bionomics **74** p. 56, **75** p. 1, GILLMER Arch. Ver. Natg. Güstrow.—*E. inclarata* p. 25, *divinula* p. 26 Alberta, *kerrvillaria* Texas p. 27, **spp. n.**, CASSINO & SWETT Lepidopterist **4.**—*E.* of Freiberg, notes and synonymy p. 40, LANGE Iris **38.**—*E.* spp. biology p. 161, SCHREIBER Intern. ent. Zs. **17.**—*E. abietaria, strobilata,* biology pp. 297–310 fig., SPESSIVTSEFF Medd. Stat. Skogsförsöksanst. **21.**—*E. insignioides* **sp. n.** E. China p. 65 fig., WEHRLI Iris **37** 1923.

Gloduria **gen. n.** *dyslogista* **sp. n.** Mexico p. 18, DYAR Ins. Insc. Mens. **12.**

Glossotrophia similata **sp. n.** Eritrea p. 207 fig., LE CERF Ann. Soc. ent. Fr. **93.**

Gnophos glaucinaria **f. n.** *juravolans* Switzerland p. 344, WEHRLI Mit. schweiz. ent. Ges. **13.**—*G. furvata* **f. n.** *meridionalis* p. 84, *glaucinaria* **f. n.** *perstrigata* p. 85, *canitiaria* **f. n.** *subpullata* p. 88, *vallesiaria* **f. n.** *subnivea* p. 89 Alps figs., WEHRLI Iris **38.**

Gonodontis bidentata **ab. n.** *trapezoides* Poland p. 11, SCHILLE Polsk. Pismo ent. **3.**

Hemerophila berenicidaria **sp. n.** p. 121 (with **f. n.** *coffearia* p. 123), *japygiaria* **f. n.** *sagarraria* p. 126 Cyrenaica figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Heterolocha jobaphegrapha **sp. n.** E. China p. 70 fig., WEHRLI Iris **37** 1923.

Hypodoxa pallida ♀ described E. Indies p. 619, PROUT Bull. Hill Mus. **1.**

Itame, notes on *ribearia* group p. 271, MCDUNNOUGH Can. Ent. **56.**

Jodis putata **f. n.** *orientalis* E. China p. 62, WEHRLI Iris **37** 1923.

Larentia quadrifasciaria **ab. n.** *stenotaenia* Austria p. (158), KAUTZ Verh. zool.-bot. Ges. Wien **73.**—*L. bicolorata* notes on, p. 136, GRABE Intern. ent. Zs. **18.**—*L. variata* variation p. 39, **abb. n.** *obscura* p. 40, *albonigrata* p. 88, *grisescens* p. 152, *herrichi, reducta* p. 153, HÖFER Ent. Rec. **36.**—*L. cucullata* **ab. n.** *anerythreia* Austria p. (5), REBEL Verh. zool.-bot. Ges. Wien **73.**—*L. autumnata* **ab. n.** *schimae* Austria p. 25, SCHAWERDA Mitt. Munchn. ent. Ges. **14.** —see *Cidaria.*

Leucobrephos middendorfii **f. n.** *nivea* Siberia p. 73, KOZHANTSHIKOV Jahrb. Martjanov. Staatsmus. **2** Lief. 1.

Limeria macraria **f. n.** *numidica* Cyrenaica p. 118 fig., TURATI Atti. Soc. ital. Sci. nat. **63.**

Lithostege cinerata **sp. n.** Cyrenaica p. 118 figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Lobogonia subfasciaria **sp. n.** S. China p. 133 fig., WEHRLI Mitt. Munchn. ent. Ges. **14.**

Lygris flavicinctata **ab. n.** *flavopriva* Dolomites p. 108, SCHAWERDA Mitt. Munchn. ent. Ges. **14.**

Lythria purpuraria **ab. n.** *communiaria* Silesia p. 88 fig., ROMANISZYN Polsk. Pismo ent. **3.**

Microloxia therapaena **sp. n.** Tunis p. 478, PROUT Bull. Hill Mus. **1.**

Milionia megadema **subsp. n.** *ptochica* p. 467, *eutyches* p. 468, *carycina* p. 469, *semirutila* p. 470 **spp. n.**, *diva* **subsp. n.** *constans* p. 469 E. Indies figs., PROUT t.c.

Naxa craspedota **sp. n.** E. Indies p. 457 fig., PROUT t.c.

Nothabraxas barlowi ♂ described p. 477 fig., PROUT t.c.

Nothomiza lycauges **sp. n.** W. China p. 482, PROUT t.c.—*N. obscuristrigata* **sp. n.** E. China p. 66 fig., WEHRLI Iris **37** 1923.

Nyssiodes ochraceus **sp. n.** E. China p. 73 fig., WEHRLI Iris **37** 1923.

Oporinia, in Sweden pp. 182–190 fig., NORDSTRÖM Ent. Tidsk. **45.**—*O. dilutata* Schiff. or *autumnata* Bkh. ? pp. 110–112, WAHLGREN Ent. Tidsk. **45.**

Organopoda atrisparsaria **sp. n.** E. China p. 62 fig., WEHRLI Iris **37** 1923.

Ortholitha dicaea **sp. n.** W. China p. 480, PROUT Bull. Hill Mus. **1.**—*O. moeniata* **f. n.** *lantoscana* p. 74, *octodurensis* **f. n.** *gallica* p. 75 S. France fig., WEHRLI Iris **38.**

Palaeodoxa subignea ♀ described E. Indies p. 456 fig., PROUT Bull. Hill Mus. **1.**

Parabapta perichrysa **sp. n.** S. China p. 136 fig., WEHRLI Mitt. Munchn. ent. Ges. **14.**

Paraclis tmetoloba **sp. n.** E. Indies p. 474 fig., PROUT Bull. Hill Mus. **1.**

Phalaena karykina **sp. n.** S. China p. 138 fig., WEHRLI Mitt. Munchn. ent. Ges. **14.**

Peratophyga hyalinata **var. n.** *totifasciata* E. China p. 66 fig., WEHRLI Iris **37** 1923.

Plutodes chrysostigma **sp. n.** S. China p. 135 fig., WEHRLI Mitt. Munchn. ent. Ges. **14.**

Prasinocyma serratilinea **subsp. n.** *ultima ; minutipuncta* **subsp. n.** *albocraspeda ; rudipunctata* p. 463, *philocala* p. 464, *tryphera, annexa* p. 465, *pratti* p. 466, *inturbida* p. 467, **spp. n.** E. Indies, PROUT Bull. Hill Mus. **1.**

Prorella woodgatata **sp. n.** New Mexico p. 28, CASSINO & SWETT Lepidopterist **4.**

Psodos alticolaria **abb. n.** *confluens, gracilis* Austria p. (80), *noricana* **ab. n.** *variegata* Austria p. (81), SCHWINGENSCHUSS Verh. zool.-bot. Ges. Wien **73.**—*P. bentelii* **f. n.** *alpmaritima* Alps p. 90 fig., WEHRLI Iris **38.**

Ptychopoda tantalidis p. 113, *maurusia* p. 116 **spp. n.** Cyrenaica figs., TURATI Atti Soc. ital. Sci. nat. **63.**—*P. vesubiata* **f. n.** *tripartita* S. France p. 71 fig., WEHRLI Iris **38.**

Rhodostrophia erythema **sp. n.** Bokhara p. 479, PROUT Bull. Hill Mus. **1.**

Rhynchobapta pernitens **sp. n.** S. China p. 137 fig., WEHRLI Mitt. Munchn. ent. Ges. **14.**

Sabaria perfulvata **sp. n.** E. Indies p. 475 fig., PROUT Bull. Hill Mus. **1.**

Scardamia rectistrigata **sp. n.** S. China p. 137 fig., WEHRLI Mitt. Munchn. ent. Ges. **14.**

Selenia lunaria gen. aest. *delunaria* **ab. n.** *constricta* p. (194), HÖFER Verh. zool.-bot. Ges. Wien **73.**

Selidosema ericetaria **f. n.** *dilucescens* Switzerland p. 345, WEHRLI Mit. Schweiz. Ent. Ges. **13.**

Semiothisa apatetica **sp. n.** Siam p. 271 fig., TAMS J. N. H. Soc. Siam **6.**

Stamnodes coenonymphata notes p. 91, **ff. n.** *prunata* p. 92, *pallidata, brunneata* p. 93, WRIGHT Ent. News **35.**

Synegia angusta **sp. n.** W. China p. 483, PROUT Bull. Hill Mus. **1.**

Tanaorhinus unipuncta **subsp. n.** *meforensis* Mefor p. 460, PROUT t.c.

Tephrina disputaria **subsp. n.** *pallidaria* Eritrea p. 209 fig., LE CERF Ann. Soc. ent. Fr. **93.**

Tephroclystia veratraria **ab. n.** *prüfferi* Poland p. 11, SCHILLE Polsk. Pismo ent. **3.**—*T. meandrata* **sp. n.** Cyrenaica p. 119 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Thalera monosticta **sp. n.** S. China p. 131 fig., WEHRLI Mitt. Munchn. ent. Ges. **14.**

Theria rupicapraria notes on, p. 25, ULE Intern. ent. Zs. **18.**

Thysanopyga puatartia **sp. n.** Mexico p. 18, DYAR Ins. Insc. Mens. **12.**

Trigonoptila postexcisa **sp. n.** S. China p. 141 fig., WEHRLI Mitt. Munchn. ent. Ges. **14.**

Tristrophis opisthommata **sp. n.** E. China p. 69 fig., WEHRLI Iris **37** 1923.

Venusia autocharis **sp. n.** N. Zealand p. 202, MEYRICK Trans. N. Z. Inst. **55.**—*V. foxi* **sp. n.** California p. 95, WRIGHT Ent. News **35.**

Xanthorhoë quadrifasciata **subsp. n.** *tannuensis* Mongolia p. 480, PROUT Bull. Hill Mus. **1.**

Zaxualpania **gen. n.** *tornitracta* **sp. n.** Mexico p. 19, DYAR Ins. Insc. Mens. **12.**

PTEROTHYSANIDAE.

Hibrildes ansorgei **subsp. n.** *albescens* Africa p. 558, JOICEY & TALBOT Bull. Hill Mus. **1.**

Opoboa **gen. n.** *sexguttata, schützei* **spp. n.** S. Nigeria p. 215, TESSMAN Mitt. zool. Mus. Berlin **10** 1921.

Pirgula **gen. n.** p. 215, *decempunctata* E. Africa, *octoguttata* Kamerun, **spp. n.** p. 216, TESSMAN Mitt. zool. Mus. Berlin **10** 1921.

LYMANTRIIDAE (LIPARIDAE).

Arctornis (*Porthesia*) *pusilla* **sp. n.** Kei Is. p. 98, HULSTAERT Ann. Soc. ent. Belg. **64.**—*A. vanroesseli* **sp. n.** New Guinea p. 135, HULSTAERT Ann. Mag. N. H. (9) **13.**—*A. alba* **f. n.** *nigripunctata* Siberia p. 154, WARNECKE Iris **38.**

Chliara svidberti **sp. n.** Guatemala p. 59, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Lymantria dispar **ab. n.** *eremita* no locality p. 30, BANDERMANN Intern. ent. Zs. **18**; **ab. n.** *flava* p. 49 no locality, BANDERMANN Ent. Zs. **37**; intersexes p. 106 figs., EMELJANOFF Biol. Zentralbl. **44**; origin of geographical variations p. 92 figs., GOLDSCHMIDT Arch. mikr. Anat. Entw. **101**; effect of starvation p. 1, KOPEĆ Biol. Bull. Wood's Hole **46**; gynandromorphs p. 66 figs., KOSMINSKY Biol. Zentralbl. **44.**

Marbla semihyalina **sp. n.** Africa p. 557, JOICEY & TALBOT Bull. Hill Mus. **1.**

Nyctemera genitalia, synonymy, *planax* p. 221, *papilionaris* p. 224, *catenata* p. 226, **spp. n.** W. Africa figs., JORDAN Nov. Zool. **31.**

Nygmia synonymy p. 213, BARNES & BENJAMIN Proc. Ent. Soc. Wash. **26.**—*N. pygmaeola* **sp. n.** Tenimber p. 136, HULSTAERT Ann. Mag. N. H. (9) **13.**—*N. basipuncta* **sp. n.** Africa p. 556, JOICEY & TALBOT Bull. Hill Mus. **1.**—*N. sericaria* p. 502, *neavei* p. 503, **spp. n.** E. Africa, TAMS Ann. Mag. N. H. (9) **14.**

Orgyia nigrocristata **sp. n.** Africa p. 556, JOICEY & TALBOT Bull. Hill Mus. **1.**

Phiditea minor **sp. n.** Paraguay p. 60, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Sapelia see *Stracena.*

Stilpnotia salicis intersexes p. 15, KOSMINSKY Biol. Zentralbl. **44.**

Stracena Swinh. (= *Sapelia* Swinh.) p. 558, JOICEY & TALBOT Bull. Hill Mus. **1.**

ANTHELIDAE.

Anthela julia **sp. n.** Dutch N. Guinea p. 99, HULSTAERT Ann. Soc. ent. Belg. **64.**—*A. intermedia* New Guinea p. 136, *brunneilinea* Kei Is. p. 137 **spp. n.**, HULSTAERT Ann. Mag. N. H. (9) **13.**

HYPSIDAE.

Asota heliconia **subsp. n.** *atrata* Solomon Is. p. xxxiv, JORDAN Trans. Ent. Soc. **1924.**

Hypsa henschkei **sp. n.** N. Australia p. 97, HULSTAERT Ann. Soc. ent. Belg. **64.**

SATURNIIDAE.

Metamorphosis and nests of Saturniidae America, BOUVIER C.R. Acad. Sci. **179** p. 858.

The classification of the wild silk-producing insects in Japan I, YAGI Rept. Alumni Assoc. Ueda Seric. Coll. **11** pp. 1–24.

Adelocephala luteciae, jucundoides p. 150, *obscura* p. 152, **spp. n.** S. America figs., BOUVIER Ann. Sci. nat. (Zool.) **7.**

Arsenura synonymy p. 172, *angulatus* **sp. n.** p. 176, *xanthopus* **var. n.** *orbignyana* p. 177 S. America, Bouvier Ann. Sci. nat. (Zool.) **7.**

Automeris zephyria **f. n.** *zephyriata* New Mexico p. 12, Barnes & Benjamin Ent. News **35.**—*A. larra,* larva p. 13, Ferreira d'Almeida Bol. Soc. ent. Brasil **1923.**

Citheronia notes on genus, *claveryi* **sp. n.** Ecuador p. 139 fig., Bouvier Ann. Sci. nat. (Zool.) **7.**

Dirphia oridocea Peru, *binasa* Argentina, **spp. n.** p. 38, Schaus Proc. U. S. Nat. Mus. **65** art. 7.

Dysdaemonia synonymy p. 173, Bouvier Ann. Sci. nat. (Zool.) **7.**

Eacles notes on genus, *imperialis* **var. n.** *approximans* Venezuela p. 147, Bouvier t.c.

Epiphora antinori **subsp. n.** *marginimacula* Congo p. 560, Joicey & Talbot Bull. Hill Mus. **1.**

Eudia pavonia **var. n.** *josephinae* Spain p. (87) fig., Schawerda Verh. zool.-bot. Ges. Wien **73.**

Halisidota agatha Bolivia, *valentina* Fr. Guiana p. 35, *orooca* Argentina, *ephrem* Bolivia p. 36, *dinora* Argentina p. 37 **spp. n.,** Schaus Proc. U. S. Nat. Mus. **65** art. 7.

Heliconisa carilapha **sp. n.** Uruguay p. 39, Schaus t.c.—*H. pagenstecheri* life history, Argentina p. 243 figs., Tams Entomologist **57.**

Nudaurelia hersilioides **sp. n.** French Guinea p. 220, Fleury Bull. Soc. ent. Fr. **1924.**

Ormiscodes infuscata p. 157, *albosignatus* note on confusion of ♀ with *gregatus* ♀ p. 158, *obliqua* p. 161, *peruvianus* p. 162 S. America, *mexicana* p. 160 Mexico **spp. n.** figs., Bouvier Ann. Sci. nat. (Zool.) **7.**

Philosamia cynthia, key to subspecies p. (111), **subspp. n.** *tetrica* Singapore, *mindanaënsis* Philippines p. (109), *lunuloides* N. India p. (110), Rebel Verh. zool.-bot. Ges. Wien **73.**

Pseudaphelia simplex **ff. n.** *marginilinea, ochracea* Congo p. 561, Joicey & Talbot Bull. Hill Mus. **1.**

Rhescyntis norax **var. n.** *guianensis* Fr. Guiana p. 174 fig., Bouvier Ann. Sci. nat. (Zool.) **7.**

Rothschildia speculum life-history Brazil p. 349, May Arch. Mus. Rio **24.**

Telea polyphemus, courtship p. 271, Rau Can. Ent. **56.**

Titaea wagneri **sp. n.** synonymy, Argentina p. 170 figs., Bouvier Ann. Sci. nat. (Zool.) **7.**

Cercophanidae.

Cercophanidae **fam. n.** with **subfamm. n.** Cercophaninae p. 181, Janiodinae p. 186 S. America figs., Jordan Nov. Zool. **31.**

Cercophana mirabilis Roths. see *Microdulia.*

Janiodes **gen. n.** p. 186, key p. 193, type *Oxytenis laverna* Druce p. 187, *dognini* p. 188, *virgata* p. 191 **spp. n.** S. America figs., Jordan t.c.

Microdulia **gen. n.** type *Cercophana mirabilis* Roths. Chile p. 185 fig., Jordan t.c.

Oxytenidae.

Oxytenidae **fam. nov.** Trop. America p. 135 figs., Jordan Nov. Zool. **31.**

Asthenidia synonymy p. 136, *transversaria* **subspp. n.** *salax* p. 141, *columbiana ; terminalis* p. 142, *celata, paulina* p. 144, *diffissa* (with **subspp. n.** *fortis, inca, tridens* p. 146) p. 145, *spinicauda* p. 147 **spp. n.,** *buckleyi* **subsp. n.** *paraensis* p. 150 Trop. America figs., Jordan t.c.

Homoeopteryx **gen. n.** p. 175, key to spp. p. 180, type *Oxytenis malecena* Druce, **subsp. n.** *prona ; major* p. 177, *elegans* p. 178, *divisa* p. 179, **spp. n.** figs., Jordan t.c.

Oxytenis malecena see *Homoeopteryx* p. 176, key to spp. p. 174, *sobrina* p. 158, *erosa, nubila* (with **subsp. n.** *acuta* p. 164) p. 163, *bicornis* p. 164, *epiphaea* p. 166, *plettina* p. 167, *spadix* p. 173 **spp. n.,** *naemia* **subspp. n.** *orecta, aravaca* p. 160 S. America figs., Jordan t.c.—*O. laverna,* Druce see *Janiodes* (Cercophanidae).

Lemoniidae.

Lemonia taraxaci **var. n.** *montana* Bulgaria p. 100, Buresch Trav. Soc. bulg. Sci. nat. **7 1915.**

BRAHMAEIDAE.

Brahmaea barnsi **sp. n.** Africa p. 562, JOICEY & TALBOT Bull. Hill Mus. **1.**

BOMBYCIDAE.

Andraca Wlk., transferred from Bombycidae to Notodontidae p. 177, ROEPKE Tijd. Ent. **67.**

Bombyx variation of pigmentation and the mutation theory pp. 347–349, LECAILLON C.R. Soc. Biol. **91.**—*B. mori* genetics pp. 185–193, ACQUA Boll. R. Staz. sperim. Gelsic. e Bachic. **3**; sex-determination, parthenogenesis pp. 19–68, CAVAZZA Redia **15**; sex-determination pp. 14–54, FOÀ Boll. R. Staz. sperim. Gelsic. e Bachic. **3**; parthenogenesis, bivoltinism pp .434–437, JUCCI Atti Accad. Lincei **33**; bivoltinism pp. 187–318, JUCCI Boll. Lab. Zool. **17** & Ann. R. Scuola Sup. Agric. Portici **19**; colour of eggs in regard to bivoltinism pp. 4–7, LOMBARDI Boll. R. Staz. sperim. Gelsic. e Bachic. **3**; genitalia pp. 25–55 figs., MICHAEL Arch. Natg. **89** (1923) 1924 A 12.—*B.* (*Sericaria*) *mori* notes pp. 69–70, KERVILLE Bull. Soc. ent. Fr. **1924.**

Colla manni **sp. n.** Bolivia p. 40, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Gunda proxima p. 162, *leefmansi* p. 168, **spp. n.** Java fig., ROEPKE Tijd. Ent. **67.**

Ocinara signifera, biology, synonymy p. 171, *lida* biology p. 174, ROEPKE t.c.

Pseudendromis **gen. n.** p. 20, *isoldae* **sp. n.** Argentina p. 21 fig., KÖHLER Fauna argentina II.

URANIIDAE.

Chrysiridia ripheus early stages p. 439, tympanic organ p. 443 fig., ELTRINGHAM Trans. Ent. Soc. **1923.**

Epiplema exornata **f. n.** *sibirica* p. 71, KOZHANTSHIKOV Jahrb. Martjanov. Staatsmus. **2** Lief. 1.

PSYCHIDAE.

Relationships of Psychidae figs., BURROWS Ent. Rec. **36** pp. 81–85, 97–99.

Biology of Alpine Psychidae, STAGER Zs. wiss. Insektenb. **19** pp. 131–134, 163–168, 181–186, 216–220.

Amatissa leonina **sp. n.** Bangkok p. 278 fig., TAMS J. N. H. Soc. Siam **6.**

Chalia rebeli **sp. n.** Argentina p. 25 figs., KÖHLER Fauna argentina II.

Hyalina albida **subsp. n.** *zabeth* Morocco p. 27, LE CERF Bull. Soc. ent. Fr. **1924.**

Monda nigroapicalis, immunda **spp. n.** Africa p. 563, JOICEY & TALBOT Bull. Hill Mus. **1.**

Oiketicus bonniwelli **sp. n.** Texas p. 24, BARNES & BENJAMIN Bull. Brooklyn Ent. Soc. **19.**

Plutorectella **gen. n.** p. 143, *abdominalis* **sp. n.** S. W. Australia p. 144, STRAND Iris **38.**

COSSIDAE.

Generic key to pupae of Cossidae of N. America, HUTCHINGS 54th Ann. Rept. Ontario Ent. Soc. **1923** p. 67.

List of palaearctic Cossidae, VON DALLA TORRE Ent. Jahrb. **33–34** pp. 102–104.

Duomitella **gen. n.** p. 22, *relicta* **sp. n.** Siberia p. 23, KOZHANTSHIKOV Jahrb. Martjanov. Staatsm. **1** 1923.

Givira brunnea p. 26, *obscura, variabilis v-nigra* p. 27, **spp. n.** Argentina figs., KÖHLER Fauna argentina II.

Hypopta giacomellii, variegata **spp. n.** Argentina p. 26 figs., KÖHLER t.c.

Isoceras **gen. n.** p. 52, *kruegeri* **sp. n.** Cyrenaica p. 51 figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Langsdorfia argentata **sp. n.** Argentina p. 26 figs., KÖHLER Fauna argentina II.

Phragmacossia **gen. n.**, *tigrisia* **sp. n.** Mesopotamia p. (161) fig., SCHAWERDA Verh. zool.-bot. Ges. Wien **73.**

Prionoxystus macmurtrei pupal case pp. 63–67 fig., HUTCHINGS 54th Ann. Rept. Ontario Ent. Soc. **1923.**

Stygia gerassimoiri **sp. n.** Siberia p. 25, KOZHANTSHIKOV Jahrb. Martjanov. Staatsm. **1** 1923.—*S. hades* **sp. n.** Morocco p. 173, LE CERF Bull. Soc. ent. Fr. **1924.**

Zeuzera helenae **sp. n.** Morocco p. 27 LE CERF Bull. Soc. ent. Fr. **1924.**

LASIOCAMPIDAE.

Artace argentina Argentina p. 48, *menuve* Brazil, *sisoes* Guatemala p. 49, *helier* Argentina p. 50, **spp. n.**, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Euglyphis planita p. 50, *senucis* Paraguay, *maha* Brazil p. 51, *serapion* Costa Rica, *vistorica* Venezuela p. 52, *audifax* Peru, *schadei* Paraguay p. 53, *gundlea* Br. Guiana, *vandrilla* Paraguay, *aldegondes* Bolivia p. 54, *casimir* French Guiana, *suramis* Guatemala p. 55, **spp. n.**, SCHAUS t.c.

Lasiocampa trifolii **ff. n.** *bilinea, ochracea* S. Tyrol p. 45, HARTIG Ent. Rdsch. **41.**

Malacosoma americana bionomics pp. 329–362 figs., SNODGRASS Smithsonian Rept. **1922.**—*M. mauginii* **sp. n.** Cyrenaica p. 50 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Pachymeta eborea **sp. n.** S. Africa p. 129 fig., TAMS Entomologist **57.**

Prorifrons granula p. 43, *hempsteadi* p. 44, **spp. n.** Guatemala, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Titya avita Brazil, *angala* Bolivia p. 46, *arpiana, everildis* Brazil p. 47, *guthagon* Fr. Guiana, *viuda* Argentina p. 48, **spp. n.**, SCHAUS t.c.

Tolype abdan **sp. n.** Panama p. 44, SCHAUS t.c.—*T. multilinea* Schaus, *sanguilenta* Dognin see *Tolytia.*—*T. crassilinea* Dognin see *Tytocha.*

Tolytia **gen. n.** type (*Tolype*) *multilinea* Schaus p. 45, SCHAUS t.c.

Tytocha **gen. n.** *temperata* **sp. n.** Guatemala p. 45, SCHAUS t.c.

MEGALOPYGIDAE.

Lagoa crispata life-history and poison apparatus pp. 403–411 fig., BAERG Ann. Ent. Soc. Amer. **17.**

Megalopyge braulio **sp. n.** Paraguay p. 61, SCHAUS Proc. U. S. Nat. Mus. **65** art 7.

Podalia schadei **sp. n.** Paraguay p. 60, SCHAUS t.c.

LIMACODIDAE.

Altha pulchrimacula **sp. n.** New Guinea p. 139, HULSTAERT Ann. Mag. N. H. (9) **13.**

Cania siamensis **sp. n.** Siam p. 280 fig., TAMS J. N. H. Soc. Siam **6.**

Euclea signata **sp. n.** Argentina p. 25 fig., KÖHLER Fauna argentina II.

Euprosterna vagabunda **sp. n.** Mexico p. 19, DYAR Insec. Insc. Mens. **12.**

Natada urichia **sp. n.** Trinidad p. 180, SCHAUS Proc. Ent. Soc. Wash. **26.**

Orthocraspeda luticrista **sp. n.** Bangkok p. 280 fig., TAMS J. N. H. Soc. Siam **6.**

Parasa mionexia **sp. n.** Argentina p. 19, DYAR Insec. Insc. Mens. **12.**

Thosea axiothea **sp. n.** New Guinea, p. 138, HULSTAERT Ann. Mag. N. H. (9) **13.**

CHARIDEIDAE.

Charidea semiaurata **subsp. n.** *orbiculata* p. 563, *splendidissima* **sp. n.** p. 564 Africa, JOICEY & TALBOT Bull. Hill Mus. **1.**

ZYGAENIDAE.

Acoloithus giganteus **sp. n.** Bolivia p. 272, HERING D. ent. Zs. **1924.**

Amesia viriditincta Hmps.(= *sanguiflua sauteri* Her.) p. 277, HERING t.c.

Cyclosia papilionaris **subsp. n.** *philippinensis* Polillo (Philippines) p. 133, DRAESEKE Iris **38.**

Eusphalera uniens **sp. n.** Dutch N. Guinea p. 100, HULSTAERT Ann. Soc. ent. Belg. **64.**

Gaedea **gen. n.** p. 272, *separata* **sp. n.** p. 273 Bolivia, HERING D. ent. Zs. **1924.**

Harrisina erythrogramma Montevideo p. 273, *anisa* Bahia, *approximata* Columbia p. 275, *boliviensis* Bolivia, *peritta* p. 274, *brevistrigata* p. 276 Brazil, **spp. n.**, HERING t.c.

Malthaca jordani, monotona p. 266, *ursula, eromena* p. 267, *analoga* p. 268, *purpusi* p. 270 Mexico, *xanthogramma* Arizona p. 268, *tetraclonioides* Peru p. 269, *monochroma* Bolivia, *crypta* Guatemala p. 270, *synecha* Panama p. 271 **spp. n.**, HERING t.c.

Procris statices **f. n.** *grisea* Silesia p. 50, NIEPELT Intern. ent. Zs. **18.**

Tetraclonia latercula **f. n.** *flavescens* America p. 272, HERING D. ent. Zs. **1924.**

Zygaena spp. early stages p. 117, GRABE Intern. ent. Zs. **18.**—*Z. lonicerae* f. n. *semicitrina* Silesia p. 189, NIEPELT Intern. ent. Zs. **18.**—*Z. centaureae* Ukraine, notes p. 27, SHELJUZHKO Mitt. Munchn. ent. Ges. **14.**—*Z. laeta* ab. n. *eos* Austria p. (15), STERZL Verh. zool.-bot. Ges. Wien **73.**—*Z. achilleae* f. n. *pseudofilipendulae* N. Tyrol p. 52, STAUDER Intern. ent. Zs. **18.**

CALLIDULIDAE.

Cleis latilimbata sp. n. Kei Is. p. 99, HULSTAERT Ann. Soc. ent. Belg. **64.**

DREPANIDAE.

Drepana falcataria ab. n. *klemensiewiczi* Poland p. 91, KAUCKI Polsk. Pismo ent. **3.**

THYRIDIDAE.

Thyris maculata larva p. 192, DYAR Ins. Insc. Mens. **12.**

PYRALIDAE.

Notes on Pyralidae of Lancashire and Cheshire, WYNNE Lancs. Ches. Nat. **16** pp. 224, 282.

Actenia pallidalis sp. n. Cyrenaica p. 144 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Ambia elphegalis Br. Guiana p. 112, *marconalis* p. 113, *asaphalis* Peru, *arnoulalis* Mexico p. 114, *symphorasalis* Guatemala, *cilianalis* Surinam, *cantiusalis* Peru p. 115, spp. n., SCHAUS Proc. Ent. Soc. Wash. **26.**

Anarmodia arcadiusalis Peru p. 69, *salviusalis* Colombia, *elongalis* Guatemala p. 70, *monjealis* Ecuador p. 71, *lojalis* Ecuador *repandalis* Peru p. 72, spp. n., SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Ancylolomia paraetoniella sp. n. Cyrenaica p. 129 figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Argyractis maronialis Fr. Guiana p. 93, *cathanalis* Costa Rica, *maguilalis* Fr. Guiana p. 94, *bedealis* Brazil, *aroalis* Venezuela p. 95, *aztecalis* Mexico, *esperanzalis* Costa Rica p. 96, *valstanalis* Venezuela, *schwarzalis* p. 97, *chejelalis* p. 98 Guatemala, *tamanalis* Colombia, *ulfridalis* West Indies p. 99, *rinconadalis* Mexico, *lucianalis* Costa Rica p. 100, *gontranalis* Mexico, *aengusalis* Brazil p. 101, *alemundalis* Costa Rica, *serapionalis* Guatemala p. 102, *psalmoidalis* Cuba, *malcusalis*, West Indies p. 103, *climacusalis* Peru, *zamoralis* Ecuador p. 104, *lulesalis* Argentine, *laurentialis* Fr. Guiana p. 105, *castusalis* Mexico p. 106, *tapajosalis* Brazil, *dodalis* Br. Guiana, *gordianalis* p. 107, *odoalis* p. 108, *benezetalis* Brazil, *conallalis* Br. Guiana p. 109, spp. n., SCHAUS Proc. Ent. Soc. Wash. **26.**

Aulacodes congallalis Guatemala p. 117, *julittalis* Panama, *nissenalis* Peru, *fiachnalis* Panama p. 118, *grimbaldalis*, *odulphalis* Guatemala p. 119, *adjutrealis* Peru p. 120, spp. n., SCHAUS t.c.

Azochis essequebalis sp. n. Br. Guiana p. 67, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Boeotarcha fallalis sp. n. Brazil p. 73, SCHAUS t.c.

Bradina finbaralis Mexico, *aaronalis* Guatemala p. 122, *hemmingalis* West Indies p. 123, spp. n., SCHAUS Proc. Ent. Soc. Wash. **26.**

Camptomastix baracoalis sp. n. Cuba p. 123, SCHAUS t.c.

Canarsia ulmiarrosorella, Clem. (= *discocellularis*, Strand) p. 249, MCDUNNOUGH Can. Ent. **56.**

Canarsiana see *Canarsia.*

Caprinia marginata sp. n. Ceram p. 490, JANSE Bull. Hill Mus. **1.**

Cataclysta azadasalis Br. Guiana, *mangholdalis* Ecuador p. 110, *phocosalis* Peru, *anicitalis* Cuba p. 111, *bronchalis* Cuba or Porto Rico p. 112 spp. n., SCHAUS Proc. Ent. Soc. Wash. **26.**—*C. lemnata* biology pp. 174–176, SOLOWIOW Zs. wiss. Insektenbiol. **19.**

Chilo gildasellus sp. n. Argentina p. 74, SCHAUS Proc. U. S. Nat. Mus. 65 art. 7.

Conchylodes vincentalis sp. n. Bolivia p. 62, SCHAUS t.c.

Cornifrons ulceratalis ff. n. *argillacealis*, *intensioralis* p. 148, *cretacealis* p. 149 Cyrenaica figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Cosmethis talboti sp. n. Ceram p. 504, JANSE Bull. Hill Mus. **1.**

Crambus abditus **sp. n.** N. Zealand p. 212, PHILPOTT Trans. N. Z. Inst. **55.**—*C. gracilellus* **f. n.** *fusculellus* p. 127, *libystidellus* **sp. n.** p. 128 Cyrenaica figs., TURATI Atti Soc. ital. Sci. nat. **63.**—*C. graphellus*, notes on in Italy pp. 8–13 fig., TURATI Mem. Soc. ent. ital. **1.**—*C. zermattensis* **subsp. n.** *müller-rutzi* Alps p. 96 fig., WEHRLI Iris **38.**

Cymoriza gigantalis **sp. n.** Ceram p. 500, JANSE Bull. Hill Mus. **1.**

Deuterophysa obregonalis **sp. n.** Mexico p. 123, SCHAUS Proc. Ent. Soc. Wash. **26.**

Dichocrocis nimalis **sp. n.** Bolivia p. 63, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Dioryctria abietella **var. n.** *hauderella* Upper Austria p. 41, MITTERBERGER Soc. ent. **39.**

Diptychophora parorma **sp. n.** N. Zealand p. 202, MEYRICK Trans. N.Z. Inst. **55.**

Ematheudes libycella **sp. n.** Cyrenaica p. 131 figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Endotricha variabilis p. 504, *simplex* p. 560, **spp. n.** Ceram, JANSE Bull. Hill Mus. **1.**

Ephestia kuehniella web production pp. 79–128, experimental modification of longevity and vitality pp. 173–195 figs., HASE & JANISCH Arb. Biol. Reichsanst Land- u. Forstw. **13.**—*E. bengasiella* p. 132, *scipioniella* p. 133, **spp. n.** Cyrenaica figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Epicrocis poliochyta **sp. n.** Australia p. 2, TURNER Ark. Zool. **16** no. 3.

Epipaschia superatalis see *Macalla thyrsisalis.*

Epischnia parkerella **sp. n.** Montana p. 196, SCHAUS Proc. Ent. Soc. Wash. **26.**

Eromene gigantea **sp. n.** Cyrenaica p. 129 figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Evergestis zernyi **sp. n.** Mesopotamia p. (163) fig., SCHAWERDA Verh. zool.-bot. Ges. Wien **73.**

Framinghamia doubt as to status p. 249, MCDUNNOUGH Can. Ent. **56.**

Galleria mellonella, heredity of acquired immunity p. 514, METALNIKOV C.R. Acad. Sci. **179.**

Homoeosoma nebulella bionomics Rumania p. 199, BORCEA Ann. Sci. Univ. Jassy **13.**—*H. eminentella* **sp. n.** Cyrenaica p. 131 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Hypochalcia dignella **ab. n.** *paleella* Austria p. (5), GALVAGNI Verh. zool.-bot. Ges. Wien **73.**—*H. lugubrella* **sp. n.** Finland p. 76, HERING Not. ent. **4.**

Liopasia purpurealis **sp. n.** Peru p. 69, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Lydia battella **sp. n.** Cyrenaica p. 134 figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Macalla type *thyrsisalis* Walk. (= *Epipaschia superatalis* Clem.) p. 502, JANSE Bull. Hill Mus. **1.**

Margaronia joiceyi p. 493, *curvilinea* p. 494, *pratti* p. 495, *brevimarginata* p. 496, **spp. n.** Ceram, JANSE Bull. Hill Mus. **1.**—*M. celestinalis* Peru, *culminalis* Ecuador p. 65, *delicatalis* Argentina, *tolimalis* Colombia p. 66 **spp. n.**, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Megastes olivalis **sp. n.** Paraguay p. 67, SCHAUS t.c.

Microcausta demeridalis **sp. n.** Guatemala p. 73, SCHAUS t.c.

Morpheis smerinthea **var. n.** *alba* Argentina p. 26, KÖHLER Fauna argent. II.

Myelois ottoella **sp. n.** Mesopotamia p. (162) fig., SCHAWERDA Verh. zool.-bot. Ges. Wien **73.**

Noctuelia achemonalis **subsp. n.** *pulcharalis* Mexico p. 206, BARNES & BENJAMIN Proc. Ent. Soc. Wash. **26.**

Nymphula panpenealis **sp. n.** Mexico p. 20, DYAR Insec. Insc. Mens. **12.**—*N. avertinalis* **sp. n.** Cuba p. 109, SCHAUS Proc. Ent. Soc. Wash. **26.**—*N. maculalis* larval habits pp. 395–402, WELCH Ann. Ent. Soc. Amer. **17.**

Oenophthira pilleriana parasites 248 pp. 42 figs., VOUKASSOVITCH Fac. Sci. Toulouse **30.**

Oligostigma odrianalis p. 116, *andeolalis* p. 117, **spp. n.** Brazil, SCHAUS Proc. Ent. Soc. Wash. **26.**

Pachyzancla ambitalis **sp. n.** Sumatra p. (74), REBEL Verh. zool.-bot. Ges. Wien **73.**

Parambia cedroalis **sp. n.** Cuba p. 116, SCHAUS Proc. Ent. Soc. Wash. **26.**

Parthenodes briocusalis Surinam p. 120, *dabiusalis* Mexico, *gualbertalis* Surinam p. 121, **spp. n.**, SCHAUS t.c.

Phlyctaenia helvalis, Wlk. (= *Framinghamia botys*, Strand) p. 249, MCDUNNOUGH Can. Ent. **56.**

Piletocera agathanalis **sp. n.** Panama p. 130, SCHAUS Proc. Ent. Soc. Wash. **26.**

Piletosoma tacticalis Guatemala p. 63, *chaquimayalis* Peru, *guianalis* Fr. & Br. Guiana p. 64 **spp. n.**, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.

Pilocrocis nalotalis **sp. n.** Ecuador p. 62, SCHAUS t.c.

Polygrammodes dubialis **sp. n.** Brazil p. 68, SCHAUS t.c.

Psammotis decoloralis **sp. n.** Cyrenaica p. 146 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Psara rubricostalis **n. n.** for *Pyrausta punctilineata* Roths. (nec South) p. 499, JANSE Bull. Hill Mus. **1.**

Psorosa ferrugatella **sp. n.** Cyrenaica p. 139 figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Pyrausta punctilineata see *Psara rubricostalis.*

Salebria psyllicella **sp. n.** Cyrenaica p. 142 fig., TURATI t.c.

Samea druchacalis **sp. n.** Mexico p. 20, DYAR Insec. Insc. Mens. **12.**

Scoparia pura, falsa p. 208, *gracilis* p. 209, **spp. n.** N. Zealand, PHILPOTT Trans. N. Z. Inst. **55.**

Staudingeria brunneella **ff. n.** *oliviella, purpurella, cretacella; vinosparsella* **sp. n.** Cyrenaica p. 138 figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Stenia ambialis Mexico and Guatemala p. 123, *nennuisalis* Peru, *dominicalis* Br. West Indies p. 124, *ceddalis* Cuba, *midalis* Ecuador, *marialis* Guatemala p. 125, *styxalis* Fr. Guiana *cronanalis, bademusalis* p. 126, *carthaghalis* Peru, *primolalis* Surinam p. 127, *guianalis* Fr. Guiana, *turiafalis* Peru, *caclamalis* Colombia, *cayugalis* p. 128, *herreralis, caulealis* Guatemala, *beuvealis* Fr. Guiana p. 129, *branealis* Jamaica p. 130, **spp. n.**, SCHAUS Proc. Ent. Soc. Wash. **26.**—*S. afrella* **sp. n.** Cyrenaica p. 145 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Sylepta mitanalis **sp. n.** Peru p. 64, SCHAUS Proc. U. S. Nat. Mus. **65** art. 7.—*S. albitorquata* **sp. n.** Bangkok p. 286 fig., TAMS J. N. H. Soc. Siam **6.**

Syria libystinella **sp. n.** Cyrenaica p. 135 figs., TURATI Atti Soc. ital. Sci. nat. **63.**

PTEROPHORIDAE.

Agdistis reciprocans Cape Colony, *dimetra* Natal **spp. n.** p. 95, MEYRICK Exot. Micr. **3.**—*A. gigas* p. 149, *nanus* p. 150 **spp. n.** Cyrenaica figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Oxyptilus clarisignis **sp. n.** Kumaon p. 93, MEYRICK Exot. Micr. **3.**

Platyptilia odiosa Natal p. 93, *locharcha* S. Rhodesia, *isocrates* Kashmir p. 94, **spp. n.**, MEYRICK t.c.—*P. rhyncholoba* p. 1, *melitroctis* p. 2, **spp. n.** C. Africa, MEYRICK Ark. Zool. **16** no. 14.

Pterophorus scholasticus **sp. n.** Palestine p. 94, MEYRICK Exot. Micr. **3.**

Tetraschalis deltozela **sp. n.** India p. 92, MEYRICK t.c.

TORTRICIDAE.

Genitalia of Tortricidae, DAMPF Schr. physik. Ges. Konigsberg **61–62** 1920–21 p. 66 figs.

N. American Eucosminae, errata and omissions in recent revision, HEINRICH J. Wash. Acad. Sci. **14** p. 385.

Tortricids of Czecho - Slovakia, MALICKY Casopis **20** 1923 pp. 129–131.

Acalla hastiana, hippophaëana, variations pp. 349–355, MÜLLER-RUTZ Mit. schweiz. ent. Ges. **13.**

Argyroploce praesiliens **sp. n.** Uganda p. 68, MEYRICK Exot. Micr. **3.**

Bactra transvola **sp. n.** Rodriguez p. 546, MEYRICK Trans. Ent. Soc. **1923** 1924.—*B. australiana* **sp. n.** S. W. Australia p. 147, STRAND Iris **38.**

Cacoecia euryplintha Bengal p. 53, *mansueta* Brasil, *expleta* Assam p. 54, *rhythmogramma* Mexico p. 106, *sarcostega* Kumaon, *subsidiaria* Kashmir p. 107, **spp. n.,** MEYRICK Exot. Micr. **3.**—*C. fumiferana* studies on, 91 pp. fig., SWAINE, CRAIGHEAD & BAILEY Canada Dept. Agric. Ent. Bull. **25.**

Capua arctophaea **sp. n.** C. Africa p. 3, MEYRICK Ark. Zool. **16** no. 14.—*C. chloraspis* **sp. n.** Bengal p. 106, MEYRICK Exot. Micr. **3.**

Carpocapsa pomonella see *Cydia.*

Carposina scierotoxa **sp. n.** C. Africa p. 2, MEYRICK Ark. Zool. **16** no. 14.

Catamacta transfixa **sp. n.** N. Zealand p. 203, MEYRICK Trans. N. Z. Inst. **55.**

Chresmarcha delia, patarea, daphnaea **spp. n.** Br. New Guinea p. 110, MEYRICK Exot. Micr. **3.**

Cnephasia finita **sp. n.** Natal p. 116, MEYRICK Exot. Micr. **3.**—*C. latomana* ♂ described p. 209, PHILPOTT Trans. N. Z. Inst. **55.**—*C. bogodiana* p. 152, *callimachana* p. 153, **spp. n.** Cyrenaica figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Conchylis chionella **sp. n.** Mesopotamia p. (163) fig., SCHAWERDA Verh. zool.-bot. Ges. Wien **73.**

Cydia (*Carpocapsa*) *pomonella* life-history in Yakima Valley of Washington 76 pp. fig., NEWCOMBER & WHITCOMB U. S. Dept. Agric. Bull. **1235.**—*C. pactolana* Zell. (= *cognatana* Barr.), *conifera* early stages p. 73, SHELDON Entomologist **57.**

Deltobathra **gen. n.** for *Tortrix nigrivelata* Wlsm., *platamodes* **sp. n.** Brazil p. 55, MEYRICK Exot. Micr. **3** 1923.

Dictyopteryx bergmanniana pupation, p. 113, TURNER Ent. Rec. **36.**

Epiblema gypsatana Anatolia p. 557, *disjectana* Livonia p. 558, *effusana* Amur p. 584, *hesperidana* Mauretania p. 609 **spp. n.** figs., KENNEL Zoologica, Stuttgart **21** Heft 54 IVᵃ 1921.

Epichorista aethocoma **sp. n.** Angola p. 563, MEYRICK Bull. Mus. H. n. Paris **1923.**—*E. abdita* **sp. n.** N. Zealand p. 664 fig., PHILPOTT Trans. N. Z. Inst. **55.**

Epinotia cruciana **varr. n.** *lepida, russata* p. 391; *seorsa* **sp. n.** p. 392, N. America, HEINRICH J. Wash. Acad. Sci. **14.**

Eucosma giganteana **var. n.** *minorata* Texas p. 388, HEINRICH t. c.—*E. hapalosarca* Punjab p. 67, *eumarodes* Fiji p. 68, **spp. n.,** MEYRICK Exot. Micr. **3.**—*E. carcharitis. anisodelta* **spp. n.** Angola p. 563, MEYRICK Bull. Mus. H. nat. Paris **1923.**

Euxanthis angelana **sp. n.** Spain p. 727, KENNEL Zoologica Stuttgart **21** Heft 54 IVᵃ 1921.—*E. exoterica* **sp. n.** C. Africa p. 2, MEYRICK Ark. Zool. **16** no. 14.—*E. numidana* **sp. n.** Cyrenaica p. 156 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Exapate congelatella **ab. n.** *kenneli* Poland p. 14, SCHILLE Polsk. Pismo ent. **3.**

Exentera senatrix **sp. n.** Arizona p. 390, HEINRICH J. Wash. Acad. Sci. **14.**

Gypsonoma adjuncta **sp. n.** Canada p. 389, HEINRICH t.c.

Hedya simplana early stages pp. 50–51, SHELDON Entomologist **57.**

Homona polyarcha **sp. n.** S. Rhodesia p. 106, MEYRICK Exot. Micr. **3.**

Hystricophora ochreicostana Wlsm. var. of *taleana* Grote N. America p. 393, HEINRICH J. Wash. Acad. Sci. **14.**

Laspeyresia refrigescens **sp. n.** Egypt p. 68, MEYRICK Exot. Micr. **3.**—*L. chlamydata* **sp. n.** Brazil p. 117, MEYRICK Ent. Mitt. **13.**

Lipoptycha guadarramana **sp. n.** Castile p. 640 fig., KENNEL Zoologica Stuttgart **21** Heft 54 IVᵃ 1921.

Lozopera fennicana **sp. n.** Finland p. 77 fig., HERING Not. ent. **4.**—*L. fusciella* p. 154, *cornelia* p. 155 **spp. n.** Cyrenaica figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Megalodoris see *Zacorisca.*

Ochetarcha **gen. n.** for *Olindia miraculosa* Meyr. p. 661, MEYRICK Trans. N. Z. Inst. **55.**

Olindia miraculosa see *Ochetarcha.*

Peronea hastiana habits p. 281–282, HUGGINS Entomologist **57,**—*P. hastiana* **ab.** *vittana* **n. n.** for *albostriana* Shel. (nec *albistriana* Haw.) p. 66; *cristana* abb. *curtisana*, *tolana* type specimens identified p. 97, SHELDON Entomologist **57.**—*P. compsoptila* **sp. n.** Assam p. 56, MEYRICK Exot. Micr. **3** 1923.

Phalonia exaequata p. 52, *reclusa* p. 53, **spp. n.** Palestine, MEYRICK t.c.

Polychrosis botrana biology etc., in Bulgaria, p. 147, BURESCH Trav. Soc. bulg. Sci. nat. **10** 1923; parasites etc., 248 pp. 42 figs., VOUKASSOVITCH Fac. Sci. Toulouse 1924.

Procalyptis albanyensis **sp. n.** S. W. Australia p. 148, STRAND Iris **38.**

Proteoteras implicata **sp. n.** Florida p. 390, HEINRICH J. Wash. Acad. Sci. **14.**

Pseudatteria metacapna p. 108, *marmarantha* Colombia, *maenas* Panama, *baccheutis* Costa Rica p. 109, **spp. n.,** MEYRICK Exot. Micr. **3.**

Schoenotenes centrophracta **sp. n.** Dutch New Guinea p. 116, MEYRICK t.c.

Spatalistis aglaoxantha **sp. n.** China p. 116, MEYRICK t.c.

Spilonota holotephras **sp. n.** Fiji p. 67, MEYRICK t.c.

Strepsicrates indentana Dyar a var. of *smithiana* Wlsm. N. America p. 385, HEINRICH J. Wash. Acad. Sci. **14.**

Thiodia ornatula p. 385, *insignata* p. 386, *segregata* p. 388 **spp. n.**; *infrim briana* **var. n.** *candidula*; *kokana* synonymy p. 387 N. America, HEINRICH t.c.

Tortrix velitans Brasil p. 54, *liobathra* Assam p. 55, *myroxesta*, *spinulosa*, *polytechna* Natal p. 114, *griseicoma*, *leptograpta* Kashmir p. 115, **spp. n.,** MEYRICK Exot. Micr. **3.**—*T. zestodes* p. 203, *orthocopa* p. 661, **spp. n.** N. Zealand, MEYRICK Trans. N. Z. Inst. **55.**—*T. argentosa* p. 210, *scruposa*, *subdola* p. 212 **spp. n.** N. Zealand, PHILPOTT Trans. N. Z. Inst. **55.**—*T. viridana*, early stages p. 213, UFFELN Intern. ent. Zs. **18.**—*T. nigrivelata* Wlsm. see *Deltobathra.*

Zacorisca (= *Megalodoris*), *phaeoxesta* Br. New Guinea, *erythromis* Moluccas, *cyprantha* Br. New Guinea p. 111, *pyrocanthara* Dutch New Guinea, *vexillifera* Br. New Guinea, *euthalama* Ceram p. 112, *poecilantha*, *platyantha* Moluccas, *aglaocarpa* Ceram p. 113, **spp. n.,** MEYRICK Exot. Micr. **3.**

AEGERIIDAE.

Field notes on western clear wing moths (Aegeriidae), ENGELHARDT Bull. Brooklyn Ent. Soc. **19** pp. 125–127.

Chamaesphecia ferganae **sp. n.** Turkestan p. 184, SHELJUZHKO Iris **38.**

Dipsosphecia kalavrytana **sp. n.** Morea p. 183, SHELJUZHKO t.c.

Sesia clavipes **subsp. n.** *eumelas* Jamaica p. 298, JORDAN Nov. Zool. **31.**

Synanthedon martjanovi **sp. n.** Siberia p. 21, SHELJUZHKO Jahrb. Martjanov. Staatsm. **1** Lief. 1 1924.

Xenoses **gen. n.,** *macropus* **sp. n.** Perak p. lxxv, DURRANT Trans. Ent. Soc. London **1923** 1924.

TINEIDAE (*s. l.*).

Notes on Tineina of Oxford, WATERS Ent. Mo. Mag. **60** p. 93.

Acrocercops atlantis Costa Rica, *hemistacta* Bengal, *helicomitra* Brasil p. 85, *sarcocrossa* Fiji p. 86, **spp. n.,** MEYRICK Exot. Micr. **3.**

Acrolophus irrisoria, *illudens* **spp. n.** Jamaica p. 76, MEYRICK t.c.

Agonoxena pyrogramma **sp. n.** Solomon Islands p. 84, MEYRICK t.c.

Anchinia oenochares S. Rhodesia p. 100, *furculata* Natal p. 101, **spp. n.,** MEYRICK t.c.

Ancylometis asbolopa **sp. n.** S. India p. 51, MEYRICK t.c.

Anticrates haematantha **sp. n.** Br. New Guinea p. 121, MEYRICK t.c.

Apatetris albiramis **sp. n.** Egypt 51, MEYRICK t.c.—*A. melanombra* early stages pp. 331–336 fig., WATT Trans. N. Z. Inst. **55.**

Aristeis hepialella Wlk. & *thwaitesi* Moore see *Sphaerelictis.*

Aristotelia repudiata Assam, *surda*, Burma, *asthenodes* Kumaon, *chloroneura* Brasil, *aulacopis* Assam p. 6, *aphromorpha* Burma, *calculatrix* p. 7, *probolopis*, *argyractis* Brasil, *primipilana* Canada p. 9, *eumeris* Arizona, *callirrhoda* N. Carolina, *calens* California p. 10, *discriminata* Canada, *melanaphra* California, *monactis* p. 10, *perterrita* p. 11 Canada, **spp. n.**, MEYRICK Exot. Micr. **3** 1923.

Ascalenia armigera Fiji, *subcrocea* Egypt, **spp. n.** p. 60, MEYRICK t.c.

Athlostola **gen. n.** (near *Lissocarena*, Heliodinidae) *pyrophracta* **sp. n.** Assam p. 97, MEYRICK t.c.

Atomotricha prospiciens **sp. n.** N. Zealand p. 662, MEYRICK Trans. N. Z. Inst. **55.**

Autosticha stagmatopis S. India, *thermopis* Ceylon, **spp. n.** p 50, MEYRICK Exot. Micr. **3** 1923.

Axyrostola **gen. n.** (near *Dactylethra*, Gelechiidae) *acherusia* **sp. n.** Burma p 29, MEYRICK t.c.

Batrachedra halans **sp. n.** Natal p. 92, MEYRICK Exot. Micr. **3.**—*B. subtilipennis* **sp. n.** Cyrenaica p. 180 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Borkhausenia idiogama **sp. n.** N. Zealand p. 681, MEYRICK Trans. N. Z. Inst. **55.**—*B. pallidula* **sp. n.** N. Zealand p. 210, PHILPOTT Trans. N. Z. Inst. **55.**

Brachmia craterospila, *ptochodryas* Assam, *xanthocosma* Uganda, *strophopa* S. India p. 46, *consummata* Assam, *trichocyma* Brazil & Br. Guiana, *cerinura* Brazil p. 47, *syntonopis* Bombay p. 48, **spp. n.**, MEYRICK Exot. Micr. **3** 1923.

Catalectis ptilozona p. 64, *drosoptila* p. 82, **spp. n.** Fiji, MEYRICK Exot. Micr. **3.**

Cenarchis **gen. n.** (Metachandidae) p. 549, *capitolina*, *liopsamma*, *vesana*, p. 550, *plectrophora*, *celebrata* p. 551, *priscata*, *veterata* p. 552 Rodriguez **spp. n.**, MEYRICK Trans. Ent. Soc. Lond. **1923** 1924.

Ceromitia praetexta Natal p. 79, *descripta* Transvaal, *rixata* S. Rhodesia p. 80, **spp. n.**, MEYRICK Exot. Micr. **3.**

Cerostoma cultrix p. 87, *vomerata* p. 88, **spp. n.** Kumaon, MEYRICK t.c.

Chalceopla evocata **sp. n.** Assam p. 53, MEYRICK t.c.

Charixena iridoxa early stages pp. 327, 331 fig., WATT Trans. N. Z. Inst. **55.**

Chelaria obtruncata Assam, *tephroplintha* Fiji p. 30, *euchorda* Brasil p. 31, **spp. n.**, MEYRICK Exot. Micr. **3** 1923.

Choropleca tripudians, *murenula* **spp. n.** Peru p. 65, MEYRICK t.c.

Coleophora aularia p. 66, *linoplecta* p. 67, **spp. n.** Egypt, MEYRICK t.c. —*C. argentulella*, *latistriella* **spp. n.** Cyrenaica p. 182 figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Colobocrossa **gen. n.** (near *Decadarchis*, Lyonetiidae) p. 83, *cylindrodes* **sp. n.** Assam p. 84, MEYRICK t.c.

Colonanthes **gen. n.** (near *Compsosaris*, Gelechiidae) *plectanopa* **sp. n.** Brasil p. 12, MEYRICK Exot. Micr. **3** 1923.

Commotrias **gen. n.** (near *Scardia*) *eucolapta* **sp. n.** S. Rhodesia p. 73, MEYRICK t.c.

Comocritis pindarica **sp. n.** Dutch New Guinea p. 117, MEYRICK t.c.

Comodica polygrapta **sp. n.** Fiji p. 82, MEYRICK t.c.

Cosmopteryx notes and key to species pp. 109–116, HERING Ent. Jahrb. **33–34.**—*C. kieraspis* **sp. n.** Bengal p. 89, MEYRICK Exot. Micr. **3.**

Cotyloscia **gen. n.** (Gelechiidae) type *caustonota* Meyr. p. 3, MEYRICK Exot. Micr. **3** 1923.

Crasimorpha **gen. n.** (near *Oestomorpha*, Gelechiidae) *peragrata* **sp. n.** Fr. Guinea p. 33, MEYRICK t.c.

Crossobela **gen. n.** (near *Brachyacma*, Gelechiidae) *barysphena* **sp. n.** Cyprus p. 34, MEYRICK t.c.

Crypsithyris liaropa **sp. n.** Sikkim p. 71, MEYRICK t.c.

Cryptolechia haemorrhanta Belgian Congo, *callisarca* N. S. Wales, **spp. n.** p. 105, MEYRICK t.c.

Cymotricha subrutila, *mochlopis* Brazil, *amauropis* p. 1, *fluctuans* Peru, *tepens* Madagascar p. 2, **spp. n.**, MEYRICK t.c.

Decadarchis subridens Fiji p. 64, *leucopogon* Malay States, *euophthalma* Solomon Islands p. 83, **spp. n.**, MEYRICK t.c.

Depressaria corichroëlla p. 173, *deliciosella* p. 174, **spp. n.** Cyrenaica figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Depressariodes **gen. n.** p. 175, *marmaricellus* **sp. n.** p. 176, Cyrenaica figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Diadexia anchylocrossa **sp. n.** Australia p. 3, TURNER Ark. Zool. **16** no. 3.

Dichomeris neatodes **sp. n.** Cyprus p. 35, MEYRICK Exot. Micr. **3** 1923.

Dinochora **gen. n.** (near *Callicerastis*) *polyantha* S. India, *clytozona* Sikkim **spp. n.** p. 69, MEYRICK t.c.

Drimylastis stiphropa **sp. n.** Kashmir p. 70, MEYRICK t.c.

Elachista albimarginella **sp. n.** Finland p. 78, HERING Not. ent. **4.**—*E. putris* p. 60, *leucobathra* p. 61, **spp. n.** Punjab, MEYRICK Exot. Micr. **3** 1923.—*E. watti* **sp. n.** N. Zealand p. 213, PHILPOTT Trans. N. Z. Inst. **55.**

Empedaula allied to *Aristotelia* not to *Chelaria* p. 11, MEYRICK Exot. Micr. **3** 1923.

Encrasima xanthoclista **sp. n.** Ceylon p. 50, MEYRICK t.c.

Endophthora tylogramma **sp. n.** N. Zealand p. 206, MEYRICK Trans. N. Z. Inst. **55.**

Enthetica tribrachia **sp. n.** S. India p. 38, MEYRICK Exot. Micr. **3** 1923.

Epactris alcaea **sp. n.** Assam p. 72, MEYRICK t.c.

Epermenia symmorias **sp. n.** Fiji p. 52, MEYRICK t.c.

Epimecyntis **gen. n.** (near *Casmara*, Oecophoridae) *eschatopa* **sp. n.** Sumatra p. 100, MEYRICK t.c.

Epithectis barydelta, notospila, citranthes, p. 15, *balsamopa* p. 16, **spp. n.** Brasil, MEYRICK t.c.

Eretmocera medinella **f. n.** *decolorata* Cyrenaica p. 179 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Ethmia mnesicosma, catapeltica Costa Rica p. 119, *euarithma, dehiscens* China p. 120, **spp. n.**, MEYRICK Exot. Micr. **3.**—*E. melanocrates* **sp. n.** Angola p. 565, MEYRICK Bull. Mus. Hist. nat. Paris 1923.

Eumenodora tetrachorda **sp. n.** India p. 91, MEYRICK Exot. Micr. **3.**

Eunebristis **gen. n.** (Gelechiidae) type *zachroa* Meyr. p. 3, MEYRICK t.c.

Eunomarcha **gen. n.** (near *Strobisia*, Gelechiidae) *glycinopis* **sp. n.** Brasil p. 26, MEYRICK t.c.

Euplocamus demodes **sp. n.** Kumaon p. 74, MEYRICK t.c.

Gelechia anacampsoidella **sp. n.** Finland p. 80 fig., HERING Not. ent **4.**—*G. lapillosa* p. 203, *aerobatis* p. 204, **spp. n.** N. Zealand, MEYRICK Trans. N. Z. Inst. **55.**—*G. praedicata* **n. n.** for *melanostictella* Rag., *anisectis* **n. n.** for *inaequalis* Wlsm., *prorepta* **n. n.** for *fulminella* Busck; *clandestina* Canada, *suspensa* Brazil p. 19, *platydoxa* Fr. Guiana, *lutraula, rhedaria* Canada p. 20, *chloroschema, trachycosma* California, *clistrodoma* Arizona p. 21, *trichostola* Br. Columbia, *xyloglypta* p. 22, *desiliens* California, *bispiculata* Arizona p. 23, **spp. n.**, MEYRICK Exot. Micr. **3** 1923.—*G. neglecta* **sp. n.** fig. N. Zealand p. 665, PHILPOTT Trans. N. Z. Inst. **55.**

Glyphidocera percnoleuca, psammolitha Brazil p. 48, *stenomorpha* Dutch Guiana, *crocogramma, orthoctenis* Brazil, *catectis* Ecuador p. 49, **spp. n.**, MEYRICK Exot. Micr. **3** 1923.

Glyphipteryx molybdastra, leucophragma **spp. n.** Angola p. 564, MEYRICK Bull. Mus. Hist. nat. Paris **1923.**—*G. octonaria* **sp. n.** N. Zealand p. 210, PHILPOTT Trans. N. Z. Inst. **55.**

Gonada pyronota **sp. n.** Peru p. 98, MEYRICK Exot. Micr. **3.**

Gracilaria azaleella early stages and bionomics pp. 275–279 fig., TRIMBLE Ent. News **35.**—*G. ferruginipennis* **sp. n.** Cyrenaica p. 183 fig., TURATI Atti Soc. ital. Sci. nat. **63.**—*G. selenitis* early stages pp. 679–683 fig., WATT Trans. N. Z. Inst. **55.**

Gymnelema holopercna, discerpta Natal, *plebigena* Zululand, **spp. n.** p. 78, MEYRICK Exot. Micr. **3.**

Gymnogramma sphaerobola Gold Coast p. 120, *psyllodecta*, *privata* S. Rhodesia p. 121, **spp. n.**, MEYRICK t.c.—*G. plagiula* **sp. n.** Angola p. 565, MEYRICK Bull. Mus. Hist. nat. Paris **1923.**

Haplochela **gen. n.** (Gelechiidae) type *mundana* Meyr. p. 32, MEYRICK Exot. Micr. **3** 1923.

Hapsifera cyrenaicensis **sp. n.** Cyrenaica p. 183 figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Hectacma indicatrix **sp. n.** Solomon Islands p. 84, MEYRICK Exot. Micr. **3.**

Hedroxena **gen. n.** (near *Batrachedra*, Cosmopterygidae) *barbara* **sp. n.** New Hebrides p. 92, MEYRICK t.c.

Helcystogramma cyanozona India p. 26, *sertigera* Peru p. 27, **spp. n.**, MEYRICK t.c.

Heringia **n. n.** for *Pigritia* p. 14, FERREIRA d'ALMEIDA Bol. Soc. ent. Brazil **1923.**

Hieromantis munerata, *tribolopa* **spp. n.** Fiji p. 66, MEYRICK Exot. Micr. **3.**

Hieroxestis divulsa **sp. n.** Egypt p. 63, MEYRICK Exot. Micr. **3** 1923.—*H. chrysodora*, *sciadocoma* **spp. n.** Rodriguez p. 555, MEYRICK Trans. Ent. Soc. Lond. **1923** 1924.

Homalopsycha pericharacta **sp. n.** Natal p. 70, MEYRICK Exot. Micr. **3.**

Hypercallia vivida Bolivia p. 103, *festicola* Peru, *margaritacea* Bolivia p. 104, **spp. n.**, MEYRICK t.c.

Hypersymmoca psammacryptis **sp. n.** Egypt p. 63, MEYRICK t.c.

Hyponomeuta padi, parasites pp. 44–46, FORSIUS Not. ent. **4.**—*H. effeta* S. Rhodesia, *calcarata* Bermuda, **spp. n.** p. 117, MEYRICK Exot. Micr. **3.**—*H. malinellus* adipose tissue of wings pp. 207–208, SEMICHON Bull. Soc. ent. Fr. **1924.**

Idiophantis disparata **sp. n.** Fiji p. 24, MEYRICK Exot. Micr. **3** 1923.

Ilingiotis hemeropa **sp. n.** Brasil p. 2, MEYRICK t.c.

Isorrhoa charadritis **sp. n.** Egypt p. 65, MEYRICK t.c.

Labdia clytemnestra p. 56, *scenodoxa* Fiji, *cosmangela* Queensland p. 57, *microdictyas*, *allotriopa* p. 58, *intuens* p. 59 Fiji, *stibogramma* Malay States p. 90, **spp. n.**, MEYRICK t.c.

Lactura eurycrates p. 121, *platyorma*, *ophioglossa*, *coleoxantha* p. 122 **spp. n.**, *obscura* Butl. a good species, *ophiucha*, *sanguiflua*, *floricoma* p. 123, *autocosma*, *empedarthra* p. 124, *triexoda* p. 125, *captatrix*, *britomartis* p. 126, *insecutrix*, *pyronympha* p. 127, *teleogramma* p. 128, New Guinea **spp. n.**, MEYRICK t.c.

Latypica malacista **sp. n.** Rodriguez p. 557, MEYRICK Trans. Ent. Soc. Lond. **1923** 1924.

Lecithocera opportuna, *xanthoteles* Assam p. 38, *dirupta* S. India, *carcerata* Assam, *recurvata* p. 39, *ochrocapna*, *cassiterota* Philippines, *alcestis* Coorg, *affusa* Assam p. 40, *hippotarcha*, *melitopyga* Ceylon, *residua* Assam p. 41, **spp. n.**, MEYRICK Exot. Micr. **3** 1923.

Leptozestis **gen. n.** (Cosmopterygidae) for Australian species of *Syntomactis*, type *parascia* Meyr. p. 91, MEYRICK t.c.

Limnoecia inconcinna p. 59, *phaeopleura* p. 90 Fiji, *chloronephes* S. Rhodesia p. 91, **spp. n.**, MEYRICK t.c.

Lita diabolicella p. 81, *amaurella* p. 82, **spp. n.** Finland fig., HERING Not. ent. **4.**

Lithocolletis fennicella **sp. n.** Finland p. 78, HERING Not. ent. **4.**—*L. alpina*, biology pp. 101–103, MITTERBERGER-STEYR Ent. Jahrb. **31** 1922.

Locharcha **gen. n.** (near *Parastega*, Gelechiidae) *emicans* **sp. n.** Peru p. 18, MEYRICK Exot. Micr. **3** 1923.

Lyonetia hemispora **sp. n.** Kumaon p. 81, MEYRICK t.c.

Lytrophila sporocentra **sp. n.** Angola p. 565, MEYRICK Bull. Mus. Hist. nat. Paris **1923.**

Macrobathra notomitra Bengal, *anisodora* Cape Colony, **spp. n.** p. 98, MEYRICK Exot. Micr. **3.**

Mallobathra strigulata, *fenwicki* **spp. n.** N. Zealand p. 214, PHILPOTT Trans. N. Z. Inst. **55.**

Mauginia **gen. n.** *kruegeri* **sp. n.** Cyrenaica p. 158 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Megacraspedus mareotidellus **sp. n.** Cyrenaica p. 169 fig., TURATI t.c.

Melasina hortatrix **sp. n.** C. Africa p. 4, MEYRICK Ark. Zool. **16** no. 14.—*M. interscissa* p. 76, *talaria, tanyphaea* Natal, *aulodoma* Nyasaland, *trichodyta* Nigeria p. 77, *lycophanes* Cape Colony p. 78 **spp. n.**, MEYRICK Exot. Micr. **3.**

Metabolaea **gen. n.** (Gelechiidae) *chlorophthalma* Brasil **sp. n.** p. 32, MEYRICK Exot. Micr. **3** 1923.

Metachanda malevola p. 547, *sublevata, declinata* p. 548, **spp. n.** Rodriguez, MEYRICK Trans. Ent. Soc. **1923** 1924.

Meteoristis **gen. n.** (Gelechiidae) p. 27, *religiosa* **sp. n.** Bengal p. 28, MEYRICK Exot. Micr. **3** 1923.

Metzneria strictella **sp. n.** Cyrenaica p. 160 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Microlechia **gen. n.** p. 162, *chretieni* **sp. n.** Cyrenaica p. 163 fig., TURATI t.c.

Mimopictes **gen. n.** *aristipella* **sp. n.** Cyrenaica p. 176 fig., TURATI t.c.

Mnesistega convexa **sp. n.** Assam p. 36, MEYRICK Exot. Micr. **3** 1923.

Monopis oriphylax **sp. n.** C. Africa p. 3, MEYRICK Ark. Zool. **16** no. 14.—*M. pentadisca* **sp. n.** Fiji p. 71, MEYRICK Exot. Micr. **3.**

Musurga **gen. n.** (Gelechiidae) *cinnabarina* p. 3, *polyaema* p. 4 Ceylon, **spp. n.**, MEYRICK Exot. Micr. **3** 1923.

Myconita **gen. n.** (Gelechiidae) type *plutelliformis* Snell p. 27, MEYRICK t.c.

Myrmecozela hieratica **sp. n.** Cyrenaica p. 186 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Nealyda accincta, leucozostra **spp. n.** Brazil p. 5, MEYRICK Exot. Micr. **3** 1923.

Nemotois argyrospila Palestine p. 52, *zonoreas* Kashmir, *smaragdaspis* Assam p. 79, **spp. n.**, MEYRICK Exot. Micr. **3.**—*N. rebelellus* **sp. n.** Cyrenaica p. 186, TURATI Atti Soc. ital. Sci. nat. **63.**

Neocorodes **gen. n.** (Gelechiidae) *amnesta* **sp. n.** Cyprus p. 36, MEYRICK Exot. Micr. **3** 1923.

Nepticula galatacma **sp. n.** Natal pp. 89 & 117, MEYRICK Exot. Micr. **3.**—*N. progama* **sp. n.** N. Zealand p. 662, MEYRICK Trans. N. Z. Inst. **55.**—*N. lucida* early stages pp. 674–679 fig., *erechtitus* **sp. n.** N. Zealand p. 686, WATT Trans. N. Z. Inst. **55.**

Nochelodes temperatella Led. (= *xenicopa* Meyr.) p. 61, MEYRICK Exot. Micr. **3** 1923.

Nosymna ochrochorda **sp. n.** Sumatra p. 118, MEYRICK t.c.

Odites citromela **sp. n.** Angola p. 564, MEYRICK Bull. Mus. H. n. Paris **1923.**

Oecophora woodiella England pp. 207–212, MELVILL Lancs. Ches. Nat. **16.**

Ogmocoma **gen. n.** (Tineidae) p. 556, *pharmacista* **sp. n.** Rodriguez p. 557, MEYRICK Trans. Ent. Soc. Lond. **1923** 1924.

Oinophila canthopa **sp. n.** Rodriguez p. 555, MEYRICK t.c.

Onebala coercita p. 42, *foederalis, pogonias* India p. 43, *cataclina, commodata* Ceylon, *leptobrocha* p. 44, *leucograpta* S. India p. 45, **spp. n.**, MEYRICK Exot. Micr. **3** 1923.

Opogona iridogramma **sp. n.** Rodriguez p. 555, MEYRICK Trans. Ent. Soc. **1923** 1924.

Orneodes compsoxantha S. Rhodesia p. 95, *phanerarcha* S. Rhodesia p. 96, **spp. n.**, MEYRICK Exot. Micr. **3.**—*O. maxima* **sp. n.** Cyrenaica p. 151 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Orthenches chartularia **sp. n.** N. Zealand p. 205, MEYRICK Trans. N. Z. Inst. **55.**—*O. similis* **sp. n.** N. Zealand p. 211, PHILPOTT Trans. N. Z. Inst. **55.**

Orygocera lenobapta **sp. n.** Rodriguez p. 553, MEYRICK Trans. Ent. Soc. **1923** 1924.

Oxysactis **gen. n.** (Gelechiidae) type *sciritis* Meyr. p. 35, MEYRICK Exot. Micr. **3** 1923.

Pachnistis solita **sp. n.** Fiji p. 45 MEYRICK Exot. Micr. **3** 1923.—*P. morologa* **sp. n.** Angola p. 564, MEYRICK Bull. Mus. H. n. Paris **1923.**

Pachygeneia **gen. n.** (Gelechiidae) *clitellaria* **sp. n.** Brasil p. 11, MEYRICK Exot. Micr. **3** 1923.

Palinorsa **gen. n.** (Oecophoridae) type *literatella* Busck p. 99, MEYRICK t.c.

Paltodora leptidella, *latistriella* **spp. n.** Cyrenaica p. 167 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Periacma eporphna **sp. n.** Assam p. 62, MEYRICK Exot. Micr. **3** 1923.

Peritorneuta gennaea **sp. n.** Fiji p. 62, MEYRICK t.c.

Persicoptila phoenoxantha **sp. n.** Fiji p. 60, MEYRICK t.c.

Pessograptis **gen. n.** (Gelechiidae) p. 29, *thalamias* **sp. n.** Brazil p. 30, MEYRICK t.c.

Pezetaera **gen. n.** p. 74, *hoplanthes* **sp. n.** Java p. 75, MEYRICK Exot. Micr. **3.**

Phalarotarsa **gen. n.** (Oecophoridae) p. 101, *cirrophaea* **sp. n.** Bolivia p. 102, MEYRICK t.c.

Philametris **gen. n.** (Oecophoridae) *aethalopa* **sp. n.** Natal p. 102, MEYRICK t.c.

Philocryptica polypodii early stages pp. 336–340 fig., WATT Trans. N. Z. Inst. **55.**

Phylopatris **gen. n.** (Gelechiidae) p. 14, *terpnodes* **sp. n.** Brasil p. 15, MEYRICK Exot. Micr. **3** 1923.

Phruriastis **gen. n.** (near *Erechthias*, Lyonetiidae) p. 63, *meliphaga* **sp. n.** Fiji p. 64, MEYRICK t.c.

Phthorimaea heterospora **sp. n.** N. Zealand p. 204, MEYRICK Trans. N. Z. Inst. **55.**—*P. ochrodeta* Palestine p. 23, *extorris* p. 50, *crocoleuca* p. 51 Egypt, **spp. n.,** MEYRICK Exot. Micr. **3** 1923.

Pigritia see *Heringia.*

Pisistrata **gen. n.** (Lyonetiidae) *trypheropa* **sp. n.** Samoa p. 81, MEYRICK t.c.

Placanthes **gen. n.** (Gelechiidae) *xanthomorpha* **sp. n.** Philippines p. 42, MEYRICK t.c.

Pleurota platyrrhoa Palestine p. 61, *idalia* Cyprus p. 62, **spp. n.,** MEYRICK Exot. Micr. **3** 1923.—*P. pentapolitella* p. 171, *syrtium* p. 172 **spp. n.,** *flavescens* **f. n.** *margaritifera* p. 171, Cyrenaica figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Plutella mariae **sp. n.** Novaya Zemlya p. 8 figs., REBEL Rept. Norw. Exp. Nov. Zemi. no. 7 1923.

Prays sparsipunctella **sp. n.** Cyrenaica p. 159 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Promalactis commotica **sp. n.** Assam p. 61, MEYRICK Exot. Micr. **3.**

Protanystis peridoxa **sp. n.** Br. New Guinea p. 97, MEYRICK t.c.

Prothinodes arvicola **sp. n.** Natal p. 70, MEYRICK t.c.

Protosynaema quaestuosa **sp. n.** N. Zealand p. 205, MEYRICK Trans. N. Z. Inst. **55.**

Prototheora monoglossa **sp. n.** Natal p. 80, MEYRICK Exot. Micr. **3.**

Pseudodoxia miseranda **sp. n.** S. India p. 62, MEYRICK t.c.

Pseudurgis protracta **sp. n.** Bechuanaland p. 74, MEYRICK Exot. Micr. **3.**—*P. sceliphrota* **sp. n.** Angola p. 566, MEYRICK Bull. Mus. Hist. nat. Paris **1923.**

Psychromnestra **gen. n.** (near *Cerostoma*, etc., Plutellidae), *isoniphas* Kashmir p. 88 (type), *phaeothicta*, *hebraea* p. 89 Kumaon, **spp. n.,** MEYRICK Exot. Micr. **3.**

Pterolonche terebrata **sp. n.** Natal p. 87, MEYRICK t.c.

Pyroderces (= *Syntomactis* Meyr.) p. 91, *megacentra* Fiji p. 59, *rhizonympha* Bengal p. 90 **spp. n.,** MEYRICK Exot. Micr. **3.**—*P. subcarnea* **sp. n.** Rodriguez p. 553, MEYRICK Trans. Ent. Soc. Lond. **1923** 1924.

Recurvaria penetrans p. 13, *pleurosaris*, *saxea* p. 14, **spp. n.** Brasil, MEYRICK Exot. Micr. **3** 1923.

Rhathamictis **gen. n.** *perspersa* **sp. n.** N. Zealand p. 662, MEYRICK Trans. N. Z. Inst. **55.**

Rhinosia striolella **sp. n.** Cyrenaica p. 166 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Rhynchotona **gen. n.** (Gelechiidae) *phaeostrota* **sp. n.** Peru p. 35, MEYRICK Exot. Micr. **3** 1923.

Sarisophora ptochomorpha **sp. n.** Cyprus p. 36, MEYRICK t.c.

Sathrogenes **gen. n.** (Gelechiidae) type *malachias* Meyr. p. 2, MEYRICK t.c.

Schistodepressaria freyi **sp. n.** Finland p. 80 fig., HERING Not. ent. **4.**

Sclerograptis **gen. n.** (Gelechiidae) *oxytypa* **sp. n.** Br. Guiana p. 31, MEYRICK Exot. Micr. **3** 1923.

Scythris albiapex **sp. n.** Finland p. 79, HERING Not. ent. **4.**—*S. nipholecta* Egypt, *inota* Kashmir, **spp. n.** p. 87, MEYRICK Exot. Micr. **3.**—*S. griseomiscella* p. 179, *tergipunctella*, *monotinctella* p. 180, **spp. n.** Cyrenaica figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Semnocosma **gen. n.** (Metachandidae) p. 548, *necromantis* **sp. n.** Rodriguez p. 549, MEYRICK Trans. Ent. Soc. Lond. **1923** 1924.

Simaethis turilega **sp. n.** Rodriguez p. 554, MEYRICK Trans. Ent. Soc. **1923** 1924.—*S. albifasciata* p. 213, *tillyardi* p. 666, **spp. n.** N. Zealand, PHILPOTT Trans. N. Z. Inst. **55.**

Sirogenes **gen. n.** (Gelechiidae) *thermophaea* **sp. n.** Peru and Brasil p. 3, MEYRICK Exot. Micr. **3** 1923.

Solenobia rebeli **sp. n.**, *alpicolella* **subsp. n.** *argenterae* Alps p. 65 figs., WEHRLI Iris **38.**

Sophronia sagittans p. 33, *catharurga* p. 34, **spp. n.** Palestine, MEYRICK Exot. Micr. **3** 1923.

Sphaerelictis **gen. n.** (near *Aristeis*, Oecophoridae) p. 102, type *dorothea* **sp. n.** Bombay, *Aristeis hepialella* Walk. & A. *thwaitesi* Moore referred to p. 103, MEYRICK t.c.

Stachyostoma **gen. n.** (Gelechiidae) *psilodoxa* **sp. n.** Ecuador p. 28, MEYRICK t.c.

Stagmatophora lactipunctella **sp. n.** Cyrenaica p. 181 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Stagmaturgis **gen. n.** (Gelechiidae) *catharosema* **sp. n.** Brasil p. 25, MEYRICK Exot. Micr. **3** 1923.

Stathmopoda synchrysa Fiji p. 66, *chrysoxesta* Sikkim p. 96, **spp. n.**, MEYRICK t.c.

Stegasta comissata **sp. n.** Brazil p. 18, MEYRICK Exot. t.c.

Stenolechia zelosaris p. 12, *frustulenta* p. 13, **spp. n.** Assam, MEYRICK t.c.

Steremniodes **gen. n.** (Gelechiidae) p. 37, *sciactis* **sp. n.** Brazil and Fr. Guiana p. 38, MEYRICK t.c.

Stiphrostola **gen. n.** (Gelechiidae) *longinqua* **sp. n.** Assam p. 25, MEYRICK t.c.

Stomopteryx discolorella, *tenuisignella* (with **f. n.** *obliterella*) **spp. n.** p. 164, *lacteolella* **f. n.** *unipunctella* p. 166 Cyrenaica figs., TURATI Atti Soc. ital. Sci. nat. **63.**

Symmoca desertella p. 169, *desertícolella* p. 170, **spp. n.** Cyrenaica figs., TURATI t.c.

Syncathedra **gen. n.** (Gelechiidae) *criminata* **sp. n.** Assam p. 37, MEYRICK Exot. Micr. **3** 1923.

Syntomactis (type *deamatella* Wlk.) see *Pyroderces*; Australian species see *Leptozestis*.

Talaeporia instabilis **sp. n.** Cyprus p. 75, MEYRICK Exot. Micr. **3.**

Tanyarches **gen. n.** (Oecophoridae) *glyptocosma* **sp. n.** Moluccas p. 99, MEYRICK t.c.

Teichobia verhuellella larval habits England p. 65, SICH Ent. Rec. **36.**

Teleja oasicolella **sp. n.** Cyrenaica p. 161 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Telphusa disclusa Palestine, *orgilopis* p. 16, *ochrotoma*, *melitoptila* Brazil, *delatrix* Peru p. 17, **spp. n.**, MEYRICK Exot. Micr. **3** 1923.

Thelyasceta **gen. n.** (Gelechiidae) type *Trichotaphe nonstrigella* Chamb. p. 27, MEYRICK t.c.

Thiotricha delacma India, *xanthodora* Burma **spp. n.** p. 24, MEYRICK t.c.

Timodora callicirrha **sp. n.** Fiji p. 86, MEYRICK Exot. Micr. **3.**

Tinea cymodoce **sp. n.** N. Zealand p. 206, MEYRICK Trans. N. Z. Inst. **55.**—*T. pyrosoma*, *antricola* **spp. n.** Assam p. 114, MEYRICK Rec. Ind. Mus. **26.**—*T. chlorospora* p. 71, *verna* Fiji, *citrocoma* India, *protaxia* Belgian Congo p. 72, **spp. n.**, MEYRICK Exot. Micr. **3.**—*T. cloacella* distinct from *granella* pp. 181–188 fig., STELLWAAG Zs. angew. Ent. **10.**—*T. bifasciatella* **sp. n.** Cyrenaica p. 185 fig., TURATI Atti Soc. ital. Sci. nat. **63.**

Tineola oblitescens **sp. n.** Malay States p. 71, MEYRICK Exot. Micr. **3.**

Tiquadra mallodeta **sp. n.** Mexico p. 73, MEYRICK t.c.

Tirathaba microsora **sp. n.** Australia p. 2, TURNER Ark. Zool. **16** no. 3.

Tonica cyanodoxa **sp. n.** Dutch New Guinea p. 105, MEYRICK Exot. Micr. **3.**

Trichotaphe amphichlora Assam, *centracma* Bombay p. 4, *thrypsandra* Ecuador p. 5, **spp. n.**, MEYRICK Exot. Micr. **3** 1923.—*T. nonstrigella* Chamb. see *Thelyasceta.*

Triclonella iphicleia **sp. n.** Costa Rica p. 98, MEYRICK Exot. Micr. **3.**

Trisophista **gen. n.** (near *Hyponomeuta*) p. 117, *doctissima* **sp. n.** Belgian Congo p. 118, MEYRICK t.c.

Urodus amphilocha Brasil, *pulvinata* Peru, **spp. n.** p. 128, MEYRICK t.c.

Xyrosaris obtorta **sp. n.** Rodriguez p. 554, MEYRICK Trans. Ent. Soc. **1923** 1924.

HEPIALIDAE.

Hepialus sylvinus **var. n.** *victoriae* Bulgaria p. 100 figs., PETKOFF Trav. Soc. bulg. Sci. nat. **6** 1914.—*H. humuli* notes p. 61, SCHNEIDER Intern. ent. Zs. **18.**

ZEUGLOPTERA

MICROPTERYGIDAE (*s. l.*).

Micropteryx sex relations p. **31**, RICHARDS Ent. Mo. Mag. **60.**

Mnesarchaea similis **sp. n.** N. Zealand p. 687 fig., PHILPOTT Trans. N. Z. Inst. **55.**

Sabatinca and allied genera, genitalia, p. 347 fig., PHILPOTT Trans. Ent. Soc. Lond. **1923.**—*S. aemula* p. 667, *aurantiaca* p. 668, **spp. n.** N. Zealand fig., PHILPOTT Trans. N. Z. Inst. **55.**

HYMENOPTERA.

On the place of origin of some melliferous Hymenoptera described by J. Pérez, BENOIST Bull. Soc. ent. Fr. **1924** pp. 109–111.

Notes on the Fossorial Hymenoptera of France, BERLAND Ann. Soc. ent. Fr. **92** 1923 pp. 363–364.

Orientation by sight in ants and bees, BRUN Mit. schweiz. ent. Ges. **13** pp. 359–364.

List of Hymenoptera of Dorset, HAINES Proc. Dorset Nat. Hist. F. Cl. **43** 1923 p. 65.

Hymenopterous fauna of Baden, LEININGER Mitt. Bad. ent. Ver. **1** pp. 64–67, 116–123.

Communication by scent glands in honey-bee p. 530, LINEBURG Amer. Nat. **58**.

Some notes on the Aculeata and Tubulifera of Lapland, LUNDBLAD Ent. Tidsk. **45** pp. 17–28.

Catalogue of Hymenoptera of Hungary, MOCSÁRY Fauna Regni Hung. Hym. **1918** pp. 7–113.

Hymenoptera new and rare for Poland, NOSKIEWICZ Polsk. Pismo ent. **2** pp. 176–186.

List of Hymenoptera of Devon, PERKINS Rept. Trans. Devon Ass. **55** p. 188.

Systematic position of Dasygastrae, ROBERTSON Bull. Brooklyn Ent. Soc. **19** p. 181.

Contribution to the knowledge of Hymenoptera of N. Africa, ROTH Bull. Soc. Hist. nat. Afr. N. **15** pp. 122–124.

Notes on Irish Hymenoptera Aculeata, STELFOX Irish Nat. **33** pp. 13–23.

Apoidea.

APIDAE (*s. l.*).

Notes on structure of bees, Ceratinidae, Xylocopidae, Panurgidae with keys, COCKERELL Proc. Ent. Soc. Wash. **26** pp. 77–85.

Notes on N. American Bombidae (Bremidae), FRISON Can. Ent. **56** pp. 292–296.

Physiology of the senses and "speech" in bees, v. FRISCH Sinnesphysiologie und "Sprache" der Bienen, 27 pp.; also Naturwissenschaften **12** p. 981.

Wing venation of bees, LUTZ Ann Acad. Sci. New York **29** p. 182 figs.

Morphology of the honey-bee larva, NELSON J. Agric. Res. **28** pp. 1167–1214 8 pls. 5 figs.

Colour preference of bees, ROBERTSON Ent. News **35** p. 65.

Gynandromorphism in bees, STÖCKHERT Arch. Natg. **90** 1924 A 2 pp. 109–131.

Bee fauna of Baden, STROHN Mitt. Bad. ent. Ver. **1** pp. 123–137.

Notes on Humble-bees in Bute, WILD Scot. Nat. **1924** p. 53 fig.

Acanthalictus **gen. n.** type *Halictus dybowskii* p. 184, *griseipennis* **sp. n.** Siberia p. 185, COCKERELL Ann. Mag. N. H. (9) **14**.

Agapostemon angelicus p. 537, *proscriptellus*, *purpureopictus* p. 538, *digueti*, *cyanozonus* p. 539, **spp. n.** Mexico, COCKERELL Proc. Cal. Acad. Sci. (4) **12**.

Alcidamea, *Osmia parvula* Dufour & Perris transferred to, p. 597, COCKERELL Ann. Mag. N. H. (9) **13**.

Allodape, key to African species p. 71, *palliceps* p. 74, *abdominalis*, *hirsuta* p. 75, *carbonaria* p. 76, *nigrescens*, *nigrothoracica*, *nigricollis* p. 77, *clypeata*, *friesei* p. 78, *strigata*, *paradoxa* p. 79 (with **var. n.** *albiceps*), *lactipennis*, *armatipes* p. 80, *elizabethana* p. 81 S. Africa, *bipunctata* Central Africa p. 75, *albicincta* p. 76, *albitarsis* N.E. Africa, *guineensis* W. Africa p. 81 **spp. n.**, FRIESE D. ent. Zs. **1924**.

Andrena nanula **var. n.** *subnuda* Germany, Hungary, Tyrol p. 35, ALFKEN Not. ent. **4**.—*A. japonica*, morphology pp. 95–96, ALFKEN Konowia **3**.—*A.*, notes on German spp. p. 180, BLÜTHGEN D. ent. Zs. **1924**.—*A. amaguensis* p. 179, *semirugosa* p. 180,

epimelaena p. 181, *meraca* p. 182, *kudiana* p. 183, **spp. n.**, Siberia, key to above spp. p. 184, COCKERELL Ann. Mag. N. H. (9) **14**.—*A. semicyanea, carissima* p. 58, *blaisdelli* p. 59, *mesoleuca* p. 60, *microdonta, yosemitensis* p. 61, *epileuca* p. 62, *lustrans* p. 63, *supervirens* (with **var. n.** *aurescens*) p. 64, **spp. n.** U.S.A., COCKERELL Pan-Pacific Ent. **1**.—*A. dolichotricha* **sp. n.** p. 348, *transnigra* **subsp. n.** *paysoni* p. 349, *metea* **sp. n.** p. 350, Wyoming, COCKERELL Ent. News **35**.—*A. opaca* **sp. n.**, *florea* **var. n.** *clavipes* p. 281 N. Africa, FRIESE Konowia **2** 1923.—*A. congruens* new to Britain pp. 277–278, PERKINS Ent. Mo. Mag. London **60**.—*A. azuriventris* (Friese), *atlantis* (Friese) Morocco p. 303 **spp. n.**, *bengasinensis* **n. n.** for *opaca* Friese p. 304, SCHULTHESS Bull. Soc. Hist. nat. Afr. N. **15**. —*A.*, key p. 177, synonymic notes p. 173, *ratisbonensis* p. 165, *enslinella* p. 169, *nanoides* p. 171 **spp. n.** Germany, STÖCKHERT Arch. Natg. **90** A 4.—*A. hattorfiana* notes p. 129, TORKA Intern. ent. Zs. **18**.—*A.*, key to subgenera of world p. 20, *bella, buckelli* p. 22, *erecta* p. 28, *fulvicrista* p. 30 Br. Columbia, (*Dactylandrena*) *maura* California p. 31, (*A.*) *banffensis* p. 32, *diversicolor* Alberta, *excellens* p. 76, *magnifica* p. 77 Br. Columbia, *nitidarum, pallida* p. 78, *potentillarum* p. 79 Alberta, *singularis, vancouverensis* p. 80, *varia* p. 81, *lillooetensis* Br. Columbia, *nigrovaria* p. 237 Saskatchewan, *nodosa* Alberta p. 238, *revelstokenis, sladeni* p. 239, (*Iomelissa*) *extensa* p. 240, (*Parandrena*) *gibberis* p. 241, *garretti, triangularis* p. 243 Br. Columbia **spp. n.**, VIERECK Can. Ent. **56**.

Anthidium dinurum **sp. n.** Siberia p. 525, COCKERELL Ann. Mag. N. H. (9) **13**.

Anthophora albifrons Sm. ♂ Peru p. 16, BRÈTHES Nunquam Otiosus ii, **1924**.—*A. aterrima* p. 51, *nigritula* p. 52, **spp. n.** California, COCKERELL Pan-Pacific Ent. **1**. — *A. vulpina* **subsp. n.** *pachypoda* Siberia p. 527, COCKERELL Ann. Mag. N. H. (9) **13**.—*A. zonata* and allies, synonymic and other notes p. 226, *walkeri* **var. n.** *nigritarsis* India and Formosa p. 231 figs., DOVER Entomologist **57**.—*A. parietina* parasites p. 16, TIEDE Arch. Ver. Natg. Güstrow **73** 1920.

Apis scent glands p. 1 figs., JACOBS Zs. Morph. Ökol. **1**.—*A. mellifica*, morphology of Italian pp. 37–78 fig., CUSCIANNA Boll. Lab. Zool. Portici **18**.

Ashmeadiella haematopoda p. 555, *microsoma, leucozona* p. 556, *digiticauda, rhodognatha* p. 557, *subangusta, crassa* p. 558, **spp. n.** Mexico, COCKERELL Proc. Cal. Acad. Sci. (4) **12**.

Augochlora azteca **var. n.** *transversalis* Lower California p. 338 fig., SANDHOUSE & COCKERELL Proc. Cal. Acad. Sci. (4) **13**.

Betheliella **gen. n.** (near *Cryptohalictoides*) p. 170, *calocharti* **sp. n.** California p. 171, COCKERELL Ent. News **35**.

Bombus biology p. 7, *kirbyellus* **var. n.** *semljaënsis ; lapponicus* **var. n.** *errans* p. 4 Novaya Zemlya, FRIESE Rept. Norw. Exp. Nov. Zeml. no. 14 1923.—(*Bremus*) biology and habits p. 65, PLATH Biol. Bull. Wood's Hole **47**.—*B. terrestris* muscles p. 246, JANISCH Anat. Anz. **57**. —*B. pennsylvanicus* notes on captive colonies & homing pp. 368–380 fig., RAU Ann. Ent. Soc. Amer. **17**.—*B. soroënsis*, forms of pp. 3–8, *brucki, distinctus, montanus, elegans, dittrichi, paradoxus, rufofasciatus, bisignatus* p. 5, *harnischi, nerbotinensis, conformis, rarissimus, paxi, glacensis, silesiacus, mirabilis, flaviventris, biguttatus, lewinensis, drescheri* p. 6, **varr. n.** Silesia, SCHOLZ N. Beitr. syst. Ins. **3**.—*B. mucidus* **var. n.** *dusmeti* Germany p. 225, TRAUTMANN Zs. wiss. Insektenbiol. **19**.

Bremus see *Bombus*.

Calloceratina **subgen. n.** see *Ceratina*.

Callomelitta nigriventris, cyanescens **spp. n.** Australia p. 231, FRIESE Konowia **3**.

Centris atripes **subsp. n.** *ferrisi* Lower California p. 49, COCKERELL Pan-Pacific Ent. **1**.—*C. americana* **var. n.** *umbrina* Amazon p. 19, *collaria* **var. n.** *fluviatilis, dorsata* **var. n.** *maculosa* Bolivia p. 20, *maerens* **varr. n.** *flavicollis* Paraguay, *infernalis* Brazil, *unicincta* Amazon, *chilensis* **var. n.** *neoqueenensis* Argentina, *versicolor* **varr. n.** *unifasciata* S. Paulo p. 21, *rufiventris* Bolivia, *flavilabris* **var. n.** *fulva* Amazon, *fusciventris* **varr. n.** *scutellosa* Bolivia, *atriceps* Paraguay, *costaricensis* **sp. n.** Costa Rica p. 22, FRIESE Konowia **3**.

Ceratina (*Calloceratina* **subgen. n.**) for *amabilis* Ckll. p. 77, COCKERELL Proc. Ent. Soc. Wash. **26.**—*C. arizonensis* **subsp. n.** *vanduzeei*, *melanoptera* **sp. n.** Mexico p. 543, COCKERELL Proc. Cal. Acad. Sci. (4) **12.**—*C. emigrata* **sp. n.** Siberia p. 527, COCKERELL Ann. Mag. N. H. (9) **13.**

Coelioxys tiburonensis p. 559, *gonaspis* p. 560, **spp. n.** Mexico, COCKERELL Proc. Cal. Acad. Sci. (4) **12.**—*C. rufescens* **subsp. n.** *nigrescens* p. 523, *mandibularis* **subsp. n.** *olgae*, *kudiana* **sp. n.** Siberia p. 524, COCKERELL Ann. Mag. N. H. (9) **13.**

Colletes albocinctus p. 533, *mulegensis* p. 534 figs., *profectus*, *perileucus* p. 535, **spp. n.** Mexico, COCKERELL Proc. Cal. Acad. Sci. (4) **12.**—*C. kudiensis* p. 594, *ventraliformis* p. 595, **spp. n.** Siberia, COCKERELL Ann. Mag. N. H. (9) **13.**—*C. annulicornis* ♂ described p. 102, NOSKIEWICZ Polsk. Pismo ent. **3.**

Conohalictoides monardae **sp. n.** Wisconsin p. 14, VIEREOK Proc. Ent. Soc. Wash. **26.**

Dasycolletes curvipes p. 217, *chalceus*, *ventralis*, (?) *crassipes* p. 218, *rufoaeneus* p. 219, **spp. n.** Australia, FRIESE Konowia **3.**

Diadasia australis **subsp. n.** *mimetica* p. 53, *blaisdelli* **sp. n.** p. 54, California, COCKERELL Pan-Pacific Ent. **1.**—*D. lutzi* **sp. n.** Wyoming p. 2, COCKERELL Amer. Mus. Novit. no. **113.**

Dianthidium leucorhinum **sp. n.** p. 525, *sibiricum* ♂ described Siberia p. 526, COCKERELL Ann. Mag. N. H. (9) **13.**

Dioxys (*Paradioxys*) *bidentata* **sp. n.** Cyrenaica p. 319, FRIESE in SCHULTHESS Bull. Soc. H. N. Afr. N. **15.**

Epeolus rufomaculatus p. 314, *geminatus* p. 315, *heterurus* p. 316, *melectimimus* p. 317, *rubrostictus* p. 318, Western U.S., COCKERELL & SANDHOUSE, *arciferus* p. 319, *pilatei* p. 320 California **spp. n.**, COCKERELL Proc. Cal. Acad. Sci. (4) **13.**

Epicharis dejeani **var. n.** *nigricollis*, *quadrinotata* **var. n.** *obscuricollis* Brazil p. 19, *binotata* Bolivia, *morio* Brazil **spp. n.** p. 20, FRIESE Konowia **3.**

Eucera kyrenaica **sp. n.** Bengasi p. 280, FRIESE Konowia **2** 1923.

Euglossa cordata **varr. n.** *auricollis*, *lazulina* p. 26; *pulcherrima* **n. n.** for *superba* Mocs. (nec Hoffmanns.); *magrettii* **var.** *nigrescens* **n. n.** for *m.* var. *nigrita* Friese (nec Lep.); *chalybaea*, *buckwaldi* p. 27, *duckei*, *bomboides* p. 28, **spp. n.** S. America, FRIESE Konowia **2** 1923.

Gastropsis pubescens **var. n.** *nigrescens* Australia p. 249, FRIESE Konowia **3.**

Halictoides crassipes **sp. n.** Oregon p. 243, COCKERELL Psyche **31.**

Halictus key to spp. of group *sexcinctus* F. p. 66, *crenicornis* Lusitania, *colliciatus* Sicily p. 131, *sajoi* p. 132 Hungary, *siculus* Sicily, *nicosiae* Cyprus, *pentheri* Asia Minor p. 133, *brachyceros* no locality, *adjikenticus* Caucasus p. 134 **spp. n.**, *determinandus* **n. n.** for *determinatus* Mor.; *sexcinctus* **var. n.** *hybridopsis* Caucasus p. 138, synonymic notes, BLÜTHGEN Konowia **2** 1923.—*H.*, keys pp. 53–64, 76–95, 253–274, *albipes* **var. n.** *rubelloides* no locality p. 55, *epipygialis* Caucasus p. 276, *foveolatus* S. France, *sociorum* Caucasus p. 278, *ilicus* Turkestan p. 279, **spp. n.**, *leucopymatus* **var. n.** *numidus* Tunisia p. 280, BLÜTHGEN Konowia **3.**—*H. tripolitanus* Cyrenaica p. 306, *dichrous* Tunisia p. 307, *schulthessi* Morocco p. 309, **spp. n.**, BLÜTHGEN in SCHULTHESS Bull. Soc. Hist. nat. Afr. N. **15.**—*H.*, revision Spain p. 343, *rubicundus* **var. n.** *laticinctus*; *fumatipennis* p. 346, *jaramielicus*, *crenicornis*, *tridivisus* p. 347, *quadripartitus* p. 348, *orihuelicus* p. 365, *pseudoplanulus coelebs* p. 367, *dusmeti* p. 378, **spp. n.**, *vergilianus* Perez ♀ p. 375 *carneiventris* Dours ♂ p. 369 Spain, BLÜTHGEN Mem. Soc. Esp. Hist. nat. **11.**—*H.*, notes on Palaearctic, *stricti frons* ♂ described p. 263 Tyrol, *angusti frons* Vach. (= *rubescens* Pérez), *dichrous* p. 265, **sp.n.** Tunis, BLÜTHGEN Bol. Soc. Esp. Hist. nat. **24.**—*H. stevensoni* **sp. n.** Samoa p. 394, COCKERELL Ann. Ent. Soc. Amer. **17.**—*H. eruditus* p. 581, *mayacensis* p. 582, *alinensis* p. 583, *tacitus* p. 584 **spp. n.**; *morbillosus* **rr. n.** *glasunovi* p. 582, *orientis* p. 583 Siberia, notes on *chaldaeorum* p. 585, COCKERELL Ann. Mag. N. H. (9) **14.**—*H. sphecodoides* **var. n.** *mackayensis*, *luteoaeneus* p. 236 *viridinitens*, *rufoaeneus*, *ruficollis* p. 237,

pilicollis, gibbosus p. 238, *niveorufus, rubriventris* p. 239, *fulviventris, alboguttatus* p. 240, *trimaculatus, franki, clariventris* p. 241, *obscuripes* p. 242, **spp. n.** Australia, FRIESE Konowia **3.** —*H.* (*Chloralictus*) key to N. American spp. p. 1, *olivarius* p. 10, *ellisiae* p. 11, *sedi, academicus* p. 12, *actinosus* p. 13, U.S.A., *liguanensis* Jamaica, *admirandus* p. 14, *tenax* p. 15, *pacatus, alius* p. 16, *caducus* p. 17, *impavidus, comis* p. 18, *meritus, arcanus* p. 19, *latus* p. 20, *unicus, absimilis* p. 21, *vintonensis* p. 22, *gaudialis, paululus* p. 23, *exalbidus* p. 24, *actuarius, sagax* p. 25, *perexiguus* p. 26, *occultus, evestigatus* p. 27, *pikei, obnubilus* p. 28, *insulsus* p. 29, *consonus, praepes* p. 30, *astutus* p. 31, *abundus, tranquillus* p. 32, *pudicus* p. 33, *lactineus, callidus* p. 34, *apertus* p. 35, *genuinus, basilicus* p. 36, *mactus* p. 37, *pensitus, accentus* p. 38, *mollis* p. 39, *merosus, malinus* p. 40, *insolitus* p. 41, **spp. n.** U.S.A., SANDHOUSE Proc. U.S. Nat. Mus. **65** art. 19.—*H. vanduzeei* p. 334, *chionocephalus* p. 335, **spp. n.** Lower California, SANDHOUSE & COCKERELL Proc. Cal. Acad. Sci. (4) **13**—*H.*, biology p. 48, parthenogenesis p. 57, STÖCKHERT Konowia **2** 1923.—*H. dybowskii* see *Acanthalictus.*

Hesperapis macrocephala p. 541, *leucura* p. 542, **spp. n.** Mexico, COCKERELL Proc. Cal. Acad. Sci. (4) **12.**

Hylaeoides concinnus **var. n.** *collaris* N.S. Wales p. 222, FRIESE Konowia **3.**

Hylaeus transversalis, sinicola p. 275, *cardioscapus* p. 276, *nigrocuneatus* p. 277, *monostictus* p. 278, *pallescens* p. 279, *wilmattae* p. 280, *polevoiae* p. 281, *concinnus, lepidulus* p. 282, **spp. n.**, *nigrocuneatus* **var. n.** *rufipennis* p. 278, *nigrolineatus* p. 577, *atromicans* p. 578, *brevicuneatus, lavrushini* p. 579, **spp. n.** Siberia, key to spp. Maritime Province of Siberia p. 580, COCKERELL Ann. Mag. N. H. (9) **14.**—*H. sonorensis* **sp. n.** Mexico p. 530, COCKERELL Proc. Cal. Acad. Sci. (4) **12.**

Lamprocolletes nigriventris, minutus **spp. n.**, *cupreus* **var. n.** *minor* Australia p. 221, FRIESE Konowia **3.**

Leioproctus (*?*) *rufiventris* **sp. n.** Adelaide p. 219, FRIESE Konowia **3.**

Macrocera nadigi **sp. n.** Morocco p. 297, FRIESE in SCHULTHESS Bull. Soc. Hist. nat. Afr. N. **15.**

Megachile key p. 355, *alpicola* **sp. n.** Europe p. 357, ALFKEN D. ent. Zs. **1924.**—*M.*, key to Formosan p. 15, *angustistrigata, binotatula* **spp. n.** Formosa p. 14, notes on German pp. 210–215, ALFKEN Konowia **3.**—*M. wilmattae* Samoa p. 392, *vavauensis* Tonga Is. p. 393, **spp. n.**, COCKERELL Ann. Ent. Soc. Amer. **17.**—*M. lobatifrons* p. 547, *adelphodonta* p. 548, *discorhina* p. 549, *odontostoma* **spp. n.**, *prosopidis* **var. n.** *testudinis* p. 550, *slevini, vanduzeei* p. 551, *sonorana* p. 552, *brachysoma, estebena, tiburonensis* p. 553, **spp. n.** Mexico. COCKERELL Proc. Cal. Acad. Sci. (4) **12.**—*M. ligniseca* **race n.** *melanaspis, willughbiella* **subspp. n.** *kudiensis, provecta* Siberia p. 529; *tsurugensis* Japan p. 599, *sichotana, hasticornis* p. 601, *lignisecula, ferritincta* p. 603, *polita* p. 604 **spp. n.**, *analis* **subsp. n.** *chionura* p. 600, *melanopyga* **subsp. n.** *amaguella* p. 602 Siberia, key to some spp. p. 605, COCKERELL Ann. Mag. N. H. (9) **13.**—*M. azteca*, nests p. 193 fig., FRIESE Zs. wiss. Insektenbiol. **19.**—*M. krügeri* **sp. n.** Bengasi p. 282, FRIESE Konowia **2** 1293.—*M. aspersa* p. 158, *rubi* p. 159, *neglecta* p. 160, *audax* p. 161, *shermani* p. 163 **spp. n.** N. Carolina, MITCHELL J. Elisha Mitchell Sci. Soc. **40.**—*M.* nests p. 27 fig., MOTHERSOLE Essex Nat. **21.** —*M. cyrenaica* **sp. n.** Cyrenaica p. 312, SCHULTHESS Bull. Soc. Hist. nat. Afr. N. **15.**

Megachiloides **gen. n.** *oenotherae* **sp. n.** N. Carolina p. 154, MITCHELL J. Elisha Mitchell Sci. Soc. **40.**

Melecta sladeni Br. Columbia, (*Pseudomelecta* ?) *suffusa* Alberta **spp. n.** p. 15, VIERECK Can. Ent. **56.**

Melissodes calloleuca Utah p. 55, *metenua* Oregon p. 56 **spp. n.**, COCKERELL Pan-Pacific Ent. **1.**—*M. sabinensis, manni* **spp. n.** Arizona p. 1, COCKERELL Amer. Mus. Novit. no. **113.**

Melitta latronis **sp. n.** Siberia p. 596, COCKERELL Ann. Mag. N. H. (9) **13.**

Melitturga, spelling of name, placed in Panurgidae p. 84, COCKERELL Proc. Ent. Soc. Wash. **26.**

Nomada fennica **sp. n.** p. 36 Finland, *obscura* **var. n.** *bitincta* p. 37 Germany, ALFKEN Not. ent. **4.**—*N. chrysopyga* **f. n.** *umbripennis* N. Africa p. 247, ALFKEN D. ent. Zs. **1924.**—*N. atrohirta, maculipennis* **spp. n.** N. Africa p. 279, FRIESE Konowia **2** 1923.—*N. atrohirta* p. 317, *maculipennis* p. 318, further described, FRIESE in SCHULTHESS Bull. Soc. H. n. Afr. N. **15.**—*N. dzieduszyckii* **sp. n.** Poland p. 34, NOSKIEWICZ Polsk. Pismo ent. **3.**

Nomia howardi **subsp. n.** *vanduzeei* Mexico p. 540, COCKERELL Proc. Cal. Acad. Sci. (4) **12.**—*N. fulvoanalis* **sp. n.**, *argentifrons* **var. n.** *testaceipes* p. 245, *latitarsis* p. 246, *pennata, latetibialis* p. 248, **spp. n.** Australia, FRIESE Konowia **3.**

Oligotropus wilmingtoni **sp. n.** N. Carolina p. 156, MITCHELL J. Elisha Mitchell Sci. Soc. **40.**

Osmia forsii **sp. n.** Finland p. 37, ALFKEN Not. ent. **4.**—*O. corkinsi* **sp. n.** Wyoming p. 351, SANDHOUSE in COCKERELL Ent. News **35.**—*O.*, key to Indian spp. p. 201, *adae* ♀ described, synonymy of spp. p. 203, DOVER Entomologist **57.**—*O.*, key to some spp., *macrodonta* p. 598, *amaguensis* p. 599, **spp. n.** Siberia, COCKERELL Ann. Mag. N. H. (9) **13.**—*O. albohirta* **sp. n.** N. Carolina p. 164, MITCHELL J. Elisha Mitchell Sci. Soc. **40.**—*O. vanduzeei, paradisica* p. 343, *vandykei* p. 344, *bakeri, nemoris* p. 345, *solitaria* p. 346, *enixa* **spp. n.**, *aprilina* **subsp. n.** *atrovirens* p. 347, *peridonea* p. 348, *vana, kermineseina* p. 349, *laeta* p. 350, *rostrata, exilis* p. 351, *seclusa* p. 352, *sedula* p. 353, *celsa, proposita* p. 354, *visenda* p. 355, *pellax* p. 356, **spp. n.** N. America, keys ♂ p. 357, ♀ p. 360, SANDHOUSE Proc. Cal. Acad. Sci. (4) **13.**—*O. minima* **sp. n.** Tunisia p. 314, SCHULTHESS Bull. Soc. H. n. Afr. N. **15.**—*O. parvula* Dufour & Perris see *Alcidamea.*

Paracolletes fervidus, australis **spp. n.** Australia p. 220, FRIESE Konowia **3.**

Parevaspis bakeri, impressus, **spp. n.** Philippines p. 745 fig., VIERECK Phil. J. Sci. **24.**

Prosopis laevithorax **sp. n.** Palestine p. 247, ALFKEN Konowia **2** 1923.—*P. chalybaea* p. 222, *sydneyensis, capitata* p. 225, *centralis, rubripes* p. 226, *flaviceps, capitata* p. 227, *major, grandis* p. 228, *obscuriceps, maculiceps* p. 229, *violacea, gacellae, niveicollis* p. 230, **spp. n.** Australasia, FRIESE Konowia **3.**

Rhophitini **trib. n.** of Panurgidae p. 83, COCKERELL Proc. Ent. Soc. Wash. **26.**

Sphecodes zablockii **sp. n.** Siberia p. 188, *croaticus* Meyer ♀ Podolia p. 189, BLÜTHGEN Polsk. Pismo ent. **2.**—*S. sibiricus* **sp. n.** Siberia p. 528, COCKERELL Ann. Mag. N. H. (9) **13.**

Stelis aterrima **subsp. n.** *melanura* Siberia p. 526, COCKERELL Ann. Mag. N. H. (9) **13.**

Stilpnosoma nigrum, adelaidae, **spp. n.** Australia p. 235, FRIESE Konowia **3.**

Tetralonia annae **subsp. n.** *patruelis, lata* **r. n.** *lautipes* Wyoming p. 2, COCKERELL Amer. Mus. Novit. no. **113.**—*T. ruficollis* **subsp. n.** *canariensis* Canary Is. p. 455, DUSMET Y ALONSO Bol. R. Soc. Esp. Hist. nat. **24.**

Triepeolus lineatulus p. 306, *vandykei* p. 307 California, *pallidiventris* Utah p. 308 **spp. n.**, *schwarzi* **subsp. n.** *subcalens; inyoensis* p. 309, *blaisdelli* p. 310 California, *haematurus* Utah p. 311, *saturninus* p. 312, *brunnescens* p. 313 California, COCKERELL & SANDHOUSE, *mensae* Oregon p. 313, *diversipes* California p. 314, **spp. n.**, COCKERELL Proc. Cal. Acad. Sci. (4) **13.**

Trigona external anatomy p. 202 figs., LUTZ Ann. Acad. Sci. N. Y. **29.**

Xylocopa martinezi **sp. n.** Peru p. 16, BRÈTHES Nunquam Otiosus—ii, **1924.**—*X. aestuans* bionomics India p. 144 figs., DOVER Trans. Ent. Soc. **1924.**—*X. braunsi* Tanganyika p. 12, *merceti* Kamerun p. 14, *mazarredoi* Palawan p. 31, *meyeri* Dekán p. 33, *pieltaini* Borneo p. 34, *alfkeni* Ecuador p. 44, *schulthessi* Brazil p. 52, *strandi* Costa Rica p. 54, *trautmanni* Ecuador p. 55, *X.* (*Koptorthosoma*) *codinai* Kamerun p. 20, *escalerai* Fernando Póo p. 22, *forsiusi* Abyssinia p. 24, *blüthgeni* p. 36, *ceballosi* p. 38, *maesoi* p. 40, Philippines **spp. n.**, DUSMET Y ALONSO Trab. Mus. Nac. Ci. nat. Ser. Zool. no. **49.**—*X.*, relations with *Hyperechia,* Nairobi p. 121 figs., POULTON Trans. Ent. Soc. Lond. **1924.**

Sphecoidea.

Sphegidae.

Notes on solitary wasps, Cornetz La Nature **1924** p. 252.

Mouth-parts of Sphegidae, Ulrich Zs. Morph. Oekol. **1** p. 539 figs.

Belomicrus braunsii p. 186, *ferrieri* p. 265 S. Africa, *steckii* France p. 188, *moricei* Palestine p. 192, *meyeri* Quetta p. 260, *schulthessi* Transcaspia p. 261, *waterstonii* Palestine p. 263, **spp. n.** figs., Kohl Konowia **2** 1923.

Brachycistus (*Brachycistellus*) *inermis* **sp. n.** Arizona p. 23, Malloch Bull. Brooklyn Ent. Soc. **19.**

Chlorion elegans nesting habits p. 269, Ainslie Can. Ent. **56.**

Notogonia peruana **sp. n.** Peru p. 15, Brèthes Nunquam Otiosus—ii, **1924.**

Oxybelus maidlii **sp. n.** Baluchistan p. 274 fig., Kohl Konowia **2** 1923.

Palarus saishiuensis **sp. n.** Quelpart Island p. 202 fig., Okamoto Bull. Agric. Expt. Sta. Govt. Gen. Chosen **1.**

Psammophila valida redescription p. 365, *nicholi* **sp. n.** Arizona p. 366, Carter Ent. News **35.**

Sphex procera life history p. 121, Criddle Canad. Field Nat. **38.**—*S. gryphus* use of tool in nest building p. 486, Wheeler & Wheeler Science **59.**

Tachysphex galapagensis **sp. n.** Galapagos Is. p. 173, Rohwer Zoologica **5.**

Philanthidae.

Philanthus lyauteyi p. 292, *minimus* p. 292, **spp. n.** N. Africa fig., Schulthess Konowia **2** 1923.

Vespoidea.

Bethylidae (including Dryinidae).

Aphelopus bicolor **sp. n.** Iowa p. 192 fig., Fenton Ohio J. Sci. **24.**

Chalcogonatopus nigrus **sp. n.** [N. America] p. 193 fig., Fenton, t.c.

Goniozus antipodum bionomics p. 172, Gallard Austral. Nat. **5.**

Mercetia tenuicornis **sp. n.** Algeria p. 42, Kieffer Bull. Soc. ent. Fr. **1924.**

Prenanteon palustris **sp. n.** High Tatra p. 103 fig., Ogloblin Ceskosl. ent. spol. Jub. Sbornik 1924.

Pseudogonatopus iowensis **sp. n.** Iowa p. 191 fig., Fenton Ohio J. Sci. **24.**

Psilodryinus carinatus **sp. n.** Pennsylvania p. 160, Fouts Proc. Ent. Soc. Wash. **26.**

Scoliidae.

Dielis ciliata, mouth-parts pp. 368–396 fig., Bugnion Mit. schweiz. ent. Ges. **13.**

Scolia bidens, *flavifrons*, mouth-parts pp. 368–396 fig., Bugnion Mit. schweiz. ent. Ges. **13.**—*S.* (*Discolia*) *inouyei* **sp. n.** Quelpart Island p. 205, Okamoto Bull. Agric. Expt. Sta. Govt. Gen. Chosen **1.**

Tiphia autumnalis p. 88, *popilliavora* p. 89, *vernalis* p. 91, **spp. n.** Japan, Rohwer Proc. Ent. Soc. Wash. **26.**

Mutillidae.

Apterogyna note on Indian, *nigra* **sp. n.** p. 255, Dover Ent. Mo. Mag. **60.**

Dasymutilla bioculata, bimodal variation, pp. 236–242 fig., Mickel Ent. News **35.**

Pseudomethoca key p. 6, *dentifrontalis* (descr. Bradley) p. 11, *bequaerti* p. 13, *oculissima* p. 14, *nudula* p. 15, *cephalargia* p. 17, *flammigera* p. 21, *aureovestita* (descr. Bradley) p. 22, *pigmentata* p. 24, *nigricula* p. 26, *meritoria* p. 27, *albicoma*, *paludata* p. 29, *scrupulosa* p. 31, *carbonaria* p. 43, *russeola* p. 44, *manca* p. 45. **spp. n.** N. America figs., Mickel Proc. U. S. Nat. Mus. **64** art. 15.

Thynnidae.

Plumariidae (=Konowiellidae Bisch. and Archihymenidae Ender.) p. 114, Brues Ann. S. Afric. Mus. **19.**

Myrmecopterina (= *Archihymen* End. key p. 115, *minor* **sp. n.** p. 116 S. Africa, Brues Ann. S. Afric. Mus. **19.**

PSAMMOCHARIDAE (POMPILIDAE).

Ageniella bombycina parental habits p. 520 figs., SAVIN Nat. Hist. **24.**

Aporinellus galapagensis **sp. n.** Galapagos Is. p. 174, ROHWER Zoologica **5.**

Cryptochilus keys pp. 71–92, *nigroferrugineus* Algeria pp. 77, 89, *variipennis* p. 80, *albosignatus* Greece pp. 82, 91, *bequaerti* N. Africa pp. 83, 90, *syriacus* Syria, *transcaucasicus* Transcaucasia, *exiguus* Palestine (with **var. n.** *graecus* Greece), *hebraeus* Greece, p. 84, *hispanicus* Spain pp. 86, 92, *pseudonotatus* Bokhara, p. 86, **spp. n.,** SUSTERA Ceskosl. ent. spol. Jub. Sbornik 1924.

Notocyphus prixi p. 11, *entrerianus* p. 12 **spp. n.** Argentina, BRÈTHES Nunquam Otiosus–ii, **1924.**

Pompilus instincts p. 100, FERTON Rev. Zool. agric. & app. **1924.**

Psammochares arequipensis **sp. n.** Peru p. 13, BRÈTHES Nunquam Otiosus—ii, **1924.**

Pseudagenia carbonaria, life history, pp. 130–132, RAMME S.B. Ges. natf. Freunde **1920.**

Salius edmondii **sp. n.** Peru p. 12, BRÈTHES Nunquam Otiosus–ii, **1924.**

EUMENIDAE.

Odynerus rubropictus ♂ described p. 456, DUSMET Y ALONSO Bol. R. Soc. Esp. Hist. nat. **24.**—*O. marii* **sp. n.** Argentina p. 13, BRÈTHES Nunquam Otiosus—ii, **1924.**

VESPIDAE.

Dolichovespula diabolica (= *fernaldi*) p. 40, DUNCAN Pan-Pacific Ent. **1.**

Nectarina championi **sp. n.** fig. Panama p. 305, DOVER Psyche **31.**

Odontophotopsis crassus, obliquus **spp. n.** Br. Columbia p. 112, VIERECK Can. Ent. **56.**

Odynerus haematodes **var. n.** *tripolitana ; cyrenaicus* **sp. n.** Bengasi p. 282 figs., subgen. *Hoplopus* key p. 283, *mimeticus* p. 287 Jericho, *bengasinus* p. 288 Bengasi, *ezechiae* p. 290 Greece, *rex* (with **varr. n.** *obscurior, clarior* Turkestan **spp. n.**); *luteolus* Lep.(= *schrammi* Dusmet) p. 285 figs., SCHULTHESS Konowia **2** 1923.

Rhynchium proserpina p. 2, *hoplopoides* **spp. n.,** *abyssinicum* **var. n.** *albicauda, synagroides* **varr. n.** *alpha, beta, gamma* p. 1 Rhodesia, SCHULTHESS Verh. zool.-bot. Ges. Wien **73.**

Chrysidoidea.

CHRYSIDIDAE.

Chrysis (*Tetrachrysis* ?) *tenuicornis,* Oregon, Lower California p. 327, *C.* (*Hexachrysis*) *serrata* Washington, California p. 329 **spp. n.** figs., TAYLOR Proc. Cal. Acad. Sci. (4) **13.**

Formicoidea.

FORMICIDAE.

Systematic and synonymic catalogue of Brazilian ants, BORGMEIER Arch. Mus. Nac. Rio de Janeiro **24** pp. 33–103.

Biological and other notes and descriptions of ants from Sumatra, CRAWLEY & JACOBSON Ann. Mag. N. H. (9) **13** p. 380.

Formicidae from Malta, EMERY Boll. Soc. ent. ital. **56** pp. 11–12.

Formicidae from Cyrenaica, EMERY Boll. Soc. ent. ital. **56** pp. 6–11.

Formicidae from Elba, FINZI Boll. Soc. ent. ital. **56** pp. 12–15.

Biology, senses and instinct of the red ant, HINGSTON J. Bombay N. H. Soc. **29** p. 908.

Guests of Dorylinae and Ecitoninae, REICHENSPERGER Mit. schweiz. ent. Ges. **13** pp. 357–358.

An annotated list of the ants of Mississippi, SMITH Ent. News **35** pp. 47–54, 77–85 and 121–127.

Notes on ant fauna of Saxony, VIEHMEYER Sitz. Ber. Isis **1915** 1916 p. 61.

Polymorphism and food-habits in ants, VIEHMEYER Arch. Natg. **89** A 12 pp. 1–12 figs.

Ants collected in Barbados and Antigua in 1918, WHEELER Univ. Iowa Studies N. H. **10** no. 3 1923 pp. 3–9.

Ants of Krakatau and other Sunda Islands, WHEELER Treubia **5** pp. 239–258.

Acanthomyops brunneus, myrmecophiles, Britain pp. 121 and 133, DONISTHORPE Ent. Rec. **36**.

Acanthostichus ramosmexiae **sp. n.** Argentina p. 260 fig., BRUCH Physis **7**.

Acromyrmex nigrosetosa **stt. n.** *garbei*, *pulchella* p. 18, (*Moelerius*) *balzani* **var. n.** *senex* p. 19 Brazil, SANTSCHI Ann. Soc. ent. Belg. **64**.

Aenictogiton schoutedeni **sp. n.** Belgian Congo p. 198 fig. key p. 200, SANTSCHI Rev. zool. afr. **12**.

Aenictus vagans Lower Niger p. 200, *pharao* Sudan p. 202 **spp. n.**, *alluaudi* **var. n.** *falcifer* p. 203, *eugeni* **var. n.** *henrii* p. 204 Belgian Congo, *rotundatus* **st. n.** *guineensis* Fr. Guinea p. 204 figs., SANTSCHI Rev. zool. afr. **12**.

Aphaenogaster testaceopilosa semipolita **var. n.** *melitensis* Malta p. 12, EMERY Boll. Soc. ent. ital. **56**.—*A. longiceps ruginota* **var. n.** *anguliceps* N. S. Wales p. 311, VIEHMEYER Ent. Mitt. **13**.—*A. barbara* notes, Jerusalem p. 538, BUXTON Trans. Ent. Soc. **1923** 1924.

Atopomyrmex mocquerysi **var. n.** *erigens* Belgian Congo p. 205, SANTSCHI Rev. zool. afr. **12**.

Bothriomyrmex rogeri Spain **sp. n.** p. 168 fig., EMERY Boll. Lab. Zool. Portici **17**.

Camponotus herculeanus effect of vibration on pp. 100–101, DICHTL Zs. wiss. Insektenbiol. **19**.—*C. sylvaticus* **var. n.** *catalana*, *lateralis piceus* **var. n.** *figaro*, Spain p. 170, EMERY Boll. Lab. Zool. Portici **17**.—*C. ligniperda* embryology and bacterial symbiosis p. 173, HECHT Zs. wiss. Zool. **122**.—*C.* (*Myrmoturba*) *xanthogaster* **sp. n.** Brazil p. 19, SANTSCHI Ann. Soc. ent. Belg. **64**.—*C. sexguttatus* **varr. n.** *antiguanus* Antigua, *montserratensis* Montserrat, *unitaeniatus* Peru, *sexguttatus* **subsp. n.** *basirechus* Brazil p. 7, WHEELER Univ. Iowa Studies N. H. **10** no. 3 1923.—*C.* (*Pseudocolobopsis*) *macilentus* **varr. n.** *sapphirinus* p. 114, *pervicus* p. 115, *castellanus* p. 116, (*Myrmocladoecus*) *planus* **var. n.** *sansalvadorensis* p. 119, Galapagos Is. figs., WHEELER Zoologica **5**.

Cataulacus inermis **sp. n.** p. 218, *wissmanni* **var. n.** *striativentris* p. 219, *jeanneli* **var. n.** *aethiops* p. 220, *elongatus* **sp. n.** p. 221, Belgian Congo figs., SANTSCHI Rev. zool. afr. **12**.

Cerapachys (*Chrysapace*) *crawleyi* **n. n.** conditionally suggested for *Chrysapace jacobsoni* Crawley p. 225, WHEELER Psyche **31**.

Chrysapace **gen. n.** p. 380, *jacobsoni* **sp. n.** Sumatra p. 381 fig., CRAWLEY Ann. Mag. N. H. (9) **13**.—*C.*, perhaps a subgenus of *Cerapachys* p. 224, WHEELER Psyche **31**.

Cremastogaster dohrni subsp. *rogenhoferi* **var. n.** *nitida*, *cornuta* **sp. n.** p. 395, *spengeli* **subsp. n.** *compacta* p. 398 Sumatra, CRAWLEY Ann. Mag. N. H. (9) **13**.—*C. auberti antaris* **var. n.** *nigripes* Cyrenaica p. 9, EMERY Boll. Soc. ent. ital. **56**.—*C.* (*Orthocrema*) *parallela* **sp. n.** Brazil p. 14, SANTSCHI Ann. Soc. ent. Belg. **64**.—*C. kutteri* **sp. n.** N. S. Wales p. 314, VIEHMEYER Ent. Mitt. **13**.

Cylindromyrmex (*Metacylindromyrmex*) key p. 106, *williamsi* p. 101, *boliviae* p. 104, **spp. n.** Galapagos Is., WHEELER Zoologica **5**.—*C. brevitarsus* **sp. n.** Brazil p. 5, SANTSCHI Ann. Soc. ent. Belg. **64**.

Dilobocondyla sebesiana Sebesi Is. p. 248, *karnyi* Java p. 249, *chapmani* Philippines p. 250, **spp. n.**, WHEELER Treubia **5**.

Dolichoderus grandii **sp. n.** Peru p. 119, MENOZZI Boll. Soc. ent. ital. **56**.

Dorylus notes, Belgian Congo pp. 429–436, BURGEON Rev. zool. afr. **12**.

Eciton hetschkoi, description of queen pp. 232–235 fig., BRUCH Physis **7**.—*E. frontalis* **sp. n.** Brazil p. 30, MENOZZI Boll. Soc. ent. ital. **56**.—*E. quadriglume* female p. 201 figs., REICHENSPERGER Zool. Anz. **60**.—*E.*, modification of sub-genera, *Holopone* **subgen. n.** type *rapax* p. 11, *angustatum* **st. n.** *reichenspergeri* Brazil p. 12, SANTSCHI Ann. Soc. ent. Belg. **64**.

Euponera melanaria manni **n. n.** for *papuana* Mann p. 228, VIEHMEYER Ent. Mitt. **13**.

Formica fusca glebaria notes p. 38, EMERY Rend. Acc. Sci. Bologna **27**.—*F. rufa pratensis* **var. n.** *incisa* Germany p. 155 fig., KRAUSSE Ent. Jahrb. **31** 1922.—*F. exsecta* **var. n.** *sudetica* Silesia

p. 48, SCHOLZ N. Beitr. syst. Ins. **3.**—*F. rufa* spermatogenesis p. 52 figs., TOEDTMANN Zool. Anz. **58.**—*F. rufa pratensis* habits pp. 68–77, STÄGER Zs. wiss. Insektenbiol. **19.**

Holopone **subgen. n.** see *Eciton.*

Iridomyrmex krakatauae **sp. n.** Krakatau Is. p. 252, WHEELER Treubia **5.**

Ischnomyrmex longipes fully described Sumatra p. 391, CRAWLEY Ann. Mag. N. H. (9) **13.**

Lasius bicornis, modified instinct pp. 176–178, RÜSCHKAMP Zs. wiss. Insektenbiol. **19.**

Leptogenys trilobatus **sp. n.** Belgian Congo p. 196 fig., SANTSCHI Rev. zool. afr. **12.**—*L. intricata* **sp. n.** [N. S. Wales ?] p. 228, *diminuta* F. Sm. **var.** *stitzi* **n. n.** for *papuana* Stitz p. 310, VIEHMEYER Ent. Mitt. **13.**

Leptothorax baeticus **sp. n.** p. 165, *luteus* **var. n.** *subcingulata, recedens* **subsp. n.** *pictus* p. 166 Spain fig., EMERY Boll. Lab. Zool. Portici **17.**—*L. bucheti* **var. n.** *festai* Cyrenaica p. 9, EMERY Boll. Soc. ent. ital. **56.**—*L. acervorum,* biology pp. 152–153 fig., KRAUSSE Ent. Jahrb. **31** 1922.

Macromichoides aculeatus **var. n.** *pulchellus* p. 208, st. *wasmanni* **var. n.** *abdominalis* and **st. n.** *militaris, africanus* **var. n.** *rotundatus* p. 209 Belgian Congo, key p. 210 figs., SANTSCHI Rev. zool. afr. **12.**

Macromischa bruneri p. 19, *violacea* p. 20, **spp. n.** Sierra Maestra, MANN Psyche **31.**

Metapone jacobsoni **sp. n.** Sumatra p. 389, CRAWLEY Ann. Mag. N. H. (9) **13.**

Monomorium andrei **var. n.** *furunculus* Algeria p. 165, EMERY Boll. Lab. Zool. Portici **17.**—*M. salamonis subopacum* **var. n.** *zanoni* Cyrenaica p. 9, EMERY Boll. Soc. ent. ital. **56.**

Mycetopurus goeldii **st. n.** *gentilis* Brazil p. 17, SANTSCHI Ann. Soc. ent. Belg. **64.**

Myrmecia subfasciata **sp. n.,** *flavicoma* ♀ p. 221, *forceps* var. **n.** *obscuriceps, tricolor* var. *rogeri* ♀, *michaelseni* **subsp. n.** *overbecki* p. 222 N. S. Wales, VIEHMEYER Ent. Mitt. **13.**

Myrmecina nesaea **sp. n.** Sebesi Is. p. 247, WHEELER Treubia **5.**

Myrmecium mendax **sp. n.** Brazil p. 11, DE MELLO LEITÃO Bol. Soc. ent. Brasil **1923.**

Myrmecocystus notes on Palaearctic p. 301, *cursor* subsp. *aenescens* **var. n.** *flavigastra* p. 303, *albicans* subsp. *ruber* **var. n.** *cuneinodis* Transcaucasia p. 305, *bicolor* **subsp. n.** *bellicosus* Teheran p. 307, KARAWAIEW Konowia **3.**

Myrmica scabrinodis var. *rugulosoides,* sexed individuals pp. 8, 15, KUTTER Schweizer ent. Anz. **3.**—*M. rugulosa,* gynandromorphism pp. 817–830, LOMNICKI Kosmos Bull. Soc. pol. nat. **49.**

Myrmicaria castanea **sp. n.** Sumatra p. 394, CRAWLEY Ann. Mag. N. H. (9) **13.**

Myrmoxenus gordiagini **subsp. n.** *menozzii* Italy p. 120, FINZI Bol. Soc. ent. ital. **56.**

Oecophylla smaragdina biology Ceylon p. 17 figs., BUGNION Riviera scient. **10.**—*O.,* fossil and living, pp. 99–105 figs., EMERY Rend. Acc. Sci. Bologna **25** 1921.

Pheidole triconstricta **var. n.** *paranana* Brazil p. 13, SANTSCHI Ann. Soc. ent. Belg. **64.**—*P. hayesi* **sp. n.** Kansas p. 251, SMITH Ent. News **35.**—*P. desertícola* **subsp. n.** *foveifrons* p. 312, *incurvata* **sp. n.** p. 313, Australia, VIEHMEYER Ent. Mitt. **13.**—*P. williamsi* **var. n.** *seymourensis* Galapagos Is. p. 108, WHEELER Zoologica **5.**—*P. miseranda* Krakatau Is. p. 243, *dammermani* Sebesi Is. p. 244, **spp. n.,** WHEELER Treubia **5.**

Pheidologeton diversus food Indo-China p. 130, PHAM-TU-THIEN Ann. Sci. nat. Zool. (10) **7.**

Phyracaces angustatus p. 76, *bicolor* p. 77, *brevis* p. 78, *castaneus* p. 79, *inconspicuus* p. 82, *nigriventris* p. 84, *picipes* p. 86, *varians* p. 87, **spp. n.** W. Australia fig., CLARK J. R. Soc. W. Aust. **10.**—*P. fici* **sp. n.** N. S. Wales p. 222, VIEHMEYER Ent. Mitt. **13.**

Platythyrea cephalotes **sp. n.** N. S. Wales p. 224, VIEHMEYER t.c.

Plectroctena revision, *mandibularis* **var. n.** *integra* p. 161; *cristata* **var. n.** *semilaevis* p. 163; *emeryi* p. 164, *latinodis* p. 165, *punctatus* p. 170 **spp. n.**; *minor* **varr. n.** *perusta* p. 168, *liberiana, insularis* p. 169 Africa figs., SANTSCHI Rev. suisse Zool. **31.**

Podomyrma gratiosa F. Sm. ♂ described, *fortirugis* p. 315, *densestrigosa* p. 316 (with **subsp. n.** *teres*), *lampros* p. 317, *overbecki* p. 318, **spp. n.** Australia, VIEHMEYER Ent. Mitt. **13.**

Polyrhachis (*Myrma*) *militaris* key to varr. p. 222, *m.* st. *cupreopubescens* **var. n.** *pleurata* p. 223, *laboriosa* **var. n.** *architecta* p. 224 Belgian Congo, SANTSCHI Rev. zool. afr. **12.**

Ponera leninei **sp. n.** p. 7, *distinguenda* **var. n.** *dispar* p. 8, *collegiana* (with **var. n.** *paranensis*) p. 9, *wilsoni* p. 10, **spp. n.** Brazil, SANTSCHI Ann. Soc. ent. Belg. **64.**—*P. ursa* **sp. n.** Belgian Congo p. 197, SANTSCHI Rev. zool. afr. **12.**—*P. beebei* **sp. n.** fig. Galapagos Is. p. 107, WHEELER Zoologica **5.**

Prenolepis (*Nylanderia*) *vividula* subsp. *guatemalensis* **var. n.** *edenensis* Galapagos Is. p. 111, WHEELER t.c.

Prionopelta descarpentriesi **sp. n.** Madagascar p. 195, SANTSCHI Rev. zool. afr. **12.**

Pseudolasius jacobsoni **sp. n.** Sumatra p. 403 figs., CRAWLEY Ann. Mag. N. H. (9) **13.**

Rhopalopone dammermani **sp. n.** Sebesi Is. p. 240, WHEELER Treubia **5.**

Rhytidoponera rothneyi **subsp. n.** *mediana* p. 224, *caeciliae*, *acanthoponeroides* **spp. n.** p. 227 N. S. Wales, VIEHMEYER Ent. Mitt. **13.**

Sericomyrmex lüderwaldti p. 15, *morerirai* p. 16, **spp. n.** Brazil, SANTSCHI Ann. Soc. ent. Belg. **64.**

Solenopsis edouardi **var. n.** *perversa* Brazil p. 13, SANTSCHI t.c.

Stigmatomma (*Fulakora*) *elongatum* **var. n.** *paranense* Brazil p. 6, SANTSCHI t.c.

Strongylognathus huberi **subspp. n.** *italica* Elba p. 14, *alboini* Italy p. 121, FINZI Bol. Soc. ent. ital. **56.**

Tetramorium silvestrianum **sp. n.** Spain p. 167 fig., EMERY Boll. Lab. Zool. Portici **17.**—*T. caespitum punicum* **var. n.** *cyrenaica* Cyrenaica p. 10, EMERY Boll. Soc. ent. ital. **56.**—*T. caespitum* notes on p. 40, EMERY Rend. Acc. Sci. Bologna **27.**—*T. guineense* **st. n.** *pullulum* p. 211, *pusillum* st. *bantuala* **var. n.** *breve*, *schoutedeni* p. 213 Belgian Congo *commodum* Fr. & Bel. Congo p. 215 **spp. n.** figs., SANTSCHI Rev. zool. afr. **12.**—*T. guineense*, gynandromorph, pp. 136–137 fig., WHEELER Psyche **31.**

Trapeziopelta nitida p. 384, *mandibularis* p. 386 **spp. n.** Sumatra figs., CRAWLEY Ann. Mag. N. H. (9) **13.**

Triglyphothrix striatidens as a cave ant p. 123, WHEELER Rec. Ind. Mus. **26.**

Typhlomyrmex foreli **sp. n.** Brazil p. 6, SANTSCHI Ann. Soc. ent. Belg. **64.**

Proctrotrypoidea (Serphoidea).

PLATYGASTRIDAE.

Revision of the N. American Wasps of the subfamily Platygasterinae pp. 1–145 figs., FOUTS Proc. U. S. Nat. Mus. **63** art. 15A.

Eritrissomerus key p. 19, *parvus* **sp. n.** Maryland p. 22, FOUTS Proc. U. S. Nat. Mus. **63** art. 15A.

Leptacis key p. 117, *pennsylvanica* p. 120, *pallipes* p. 121, *gahani* p. 123, **spp. n.**, *ashmeadi* **n. n.** for *rugiceps* (female) p. 124, *globata* p. 129, *bradleyi* p. 132, *aciculata* p. 134, **spp. n.** figs. U.S.A., FOUTS Proc. U. S. Nat. Mus. **63** art. 15A.—*L. obscuricornis* **sp. n.** Iowa p. 161, FOUTS Proc. Ent. Soc. Wash. **26.**

Platygaster key p. 25, *fuscipennis* **sp. n.** p. 39, *confusa* **n. n.** for *pallipes* Ashm. p. 44, *lampronota* p. 48, *websteri* p. 50, *shastensis* p. 53, *lucida* p. 54, *gahani* p. 55, *texana* p. 82, *marylandica* p. 85, *atrae*, *fumipennis* p. 87, *linearis*, *errans* p. 93, **spp. n.**, *columbiana* **n. n.** for *Polygnotus alnicola* Ashm. p. 96, *pini* p. 99, *rohweri* p. 100, *relativa* p. 104, *variabilis* p. 106, **spp. n.** U.S.A. figs., FOUTS Proc. U. S. Nat. Mus. **63** art. 15A. —*P. vernalis* polyembryonic development pp. 829–839 fig., LEIBY & HILL J. Agric. Res. **28.**

Polygnotus alnicola see *Platygaster columbiana.*

Sactogaster key p. 110 *longiventris* p. 111, *mucronata* p. 114, **spp. n.**, U.S.A., FOUTS Proc. U. S. Nat. Mus. **63** art. 15A.

Synopeas otiosus **sp. n.** Algeria p. 41, KIEFFER Bull. Soc. ent. Fr. **1924.**

Trichacis key p. 13, FOUTS Proc. U. S. Nat. Mus. **63** art. 15A.

SCELIONIDAE.

Baeus rotundiventris **sp. n.** Ohio p. 20, GAHAN Proc. U. S. Nat. Mus. **65** art. 4.

Hadronotus monspeliensis **sp. n.** fig. France p. 107, PICARD Bull. Soc. ent. Fr. **1924**.

Hoplogyron similis **sp. n.** Iowa p. 160, FOUTS Proc. Ent. Soc. Wash. **26**.

Phanurus promachivorus **sp. n.** Japan p. 21, GAHAN Proc. U. S. Nat. Mus. **65** art. 4.

Telenomus alsophilae **sp. n.** Nova Scotia p. 111, VIERECK Can. Ent. **56**.

DIAPRIIDAE.

Cracinopria **gen. n.** p. 162, key, *emarginata* p. 163, *crassicornis*, *perplexa*, *marylandica* p. 164, **spp. n.** Maryland, FOUTS Proc. Ent. Soc. Wash. **26**.

BELYTIDAE.

Acropiesta semirufa **sp. n.** Maryland p. 165, FOUTS Proc. Ent. Soc. Wash. **26**.

Anectata canadensis **sp. n.** Ontario p. 165, FOUTS t.c.

Cinetus polaris **sp. n.** Novaya Zemlya p. 10, KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 14 1923.

Ismarus americanus **sp. n.** Pennsylvania p. 164, FOUTS Proc. Ent. Soc. Wash. **26**.

PROCTOTRYPIDAE (SERPHIDAE).

Calliceras pallidipes p. 161, *fasciata* p. 162, **spp. n.** Maryland, FOUTS Proc. Ent. Soc. Wash. **26**.

Paracodrus apterogynus, morphology 10 pp. fig., ZOLK Tartu Ülik. Ent. no. **3**; biology 12 pp. *id.* no. **5**.

Chalcidoidea.

Records of introduced and immigrant Chalcid-flies of the Hawaiian Islands, TIMBERLAKE Proc. Hawaiian Ent. Soc. **1923 5** pp. 418–499.

Lutheria cyanea, amended name for *ajanea* p. 174, GIRAULT Insec. Insc. Menstr. **12**.

AGAONIDAE.

Ceratosolen emmerezi **sp. n.** Mauritius p. 81 fig., GRANDI Boll. Soc. ent. ital. **56**.

CHALCIDIDAE.

Notes on and key to Finnish Chalcididae, HELLÉN Not. ent. **4** pp. 9–14.

Aplorhinus **gen. n.** (near *Dirhinus*) p. 245, *bakeri* **sp. n.** Borneo p. 247 fig., MASI Ann. Mus. civ. St. nat. **10**.

Chalcis bachi p. 1, *vegai*, *marmonti*, *corneillei*, *yamalae* p. 175, *delii*, *schuberti*, *veronesini*, *epicteti*, *aequalipunctatus* p. 176, **spp. n.** Queensland, *rex* **n. n.** for *robusta*, *silvae* **n. n.** for *tegularis* p. 175, *opponens* (= *tasmaniensis*, Gir.) p. 176, GIRAULT Ins. Insc. Menstr. **12**.—*C. rufigaster* p. 187, *persica* p. 190, **spp. n.** Persia, MASI Ann. Mus. civ. St. nat. **10**.—*C. robustella* **sp. n.** Porto Rico p. 56, WOLCOTT J. Dept. Agric. P. R. **7**.

Megalocolus, characters pp. 182–186, MASI Ann. Mus. civ. St. nat. **10**.

Spilochalcis syrphidis p. 57, *cocois*, *homaledrae*, p. 58, **spp. n.** Porto Rico, WOLCOTT J. Dept. Agric. P. R. **7**.

Stomatoceras unrubripunctus **sp. n.** Queensland p. 8, GIRAULT Insec. Insc. Menstr. **12**.

CALLIMOMIDAE.

Ovidia **gen. n.** *conicollis* **sp. n.** Nelson p. 172, GIRAULT Insec. Insc. Menstr. **12**.

EURYTOMIDAE.

Aiolomorphus rhopaloides additional notes p. 228 fig., GAHAN Proc. Ent. Soc. Wash. **26**.

Eurytoma appendigaster feeding habits p. 229, FAURE Rev. Zool. agric. & appl. **23**.—*E. capitaticornis* p. 1, *angelonini* p. 9, **spp. n.** Queensland, GIRAULT Insec. Insc. Menstr. **12**.—*E. chrysothrix* **sp. n.** fig. India p. 69, WATERSTON Bull. Ent. Res. **15**.—*E. olearia*e identity pp. 687–688, GAHAN Trans. N. Z. Inst. **55**.

Harmolita systematic position p. 224, *phyllostachitis* additional notes p. 227, GAHAN Proc. Ent. Soc. Wash. **26**.

Prodecatoma philodendri **sp. n.** fig. Paraguay p. 11, FERRIÈRE Ann. Soc. ent. Fr. **93**.

PERILAMPIDAE.

Key to genera of Perilampinae, RUSCHKA D. ent. Zs. **1924** p. 91.

Elatus prominens **sp. n.** Trieste p. 96, RUSCHKA t.c.

Perilampidea larium **sp. n.** Porto Rico p. 60, WOLCOTT J. Dept. Agric. P. R. **7.**

Perilampus ruschkai **sp. n.** Finland p. 13, HELLÉN Not. ent. **4.**

EUCHARIDAE.

Eucharis key p. 83, *specularis* p. 84 Asia Minor, *acuminata, reticulata* p. 86 Caucasus, *intermedia, schmiedeknechti* p. 88 Tunis **spp. n.** figs., RUSCHKA D. ent. Zs. **1924.**

Schizaspidia, catalogue of genus p. 52, *polyrhachicida* **sp. n.** fig. Philippines p. 49, WHEELER & WHEELER Psyche **31.**

EUPELMIDAE.

Eupelmus coccidivorus **sp. n.** Panama p. 6, GAHAN Proc. U. S. Nat. Mus. **65** art. 4.

Lecaniobius capitatus **sp. n.** Panama p. 4, GAHAN t.c.

Parooderella simplicifrons **sp. n.** Queensland p. 173, GIRAULT Insec. Insc. Mens. **12.**

ENCYRTIDAE.

Acerophagus debilis **sp. n.** fig. Mexico p. 395, TIMBERLAKE Proc. Hawaiian Ent. Soc. 1923 **5.**

Achrysopophagus modestus **sp. n.** California pp. 240 & 284 fig., TIMBERLAKE Univ. Cal. Pubns. Ent. **3.**

Anabrolepis japonica p. 104, *bifasciata* p. 106, **spp. n.** fig. Japan, ISHII Imp. Pl. Quar. Sta. Japan Bull. **3** 1923.

Anagyrus key to N. American females p. 225, *clauseni* **sp. n.** fig. California p. 226, TIMBERLAKE Univ. Cal. Pubns. Ent. **3.**

Aphycus timberlakei **sp. n.** fig. Japan p. 108, ISHII Imp. Pl. Quar. Sta. Japan Bull. **3** 1923.

Callipteroma nigra **sp. n.** Spain p. 258 fig., MERCET Bol. Soc. Esp. Hist. nat. **24.**

Calometopia compared with *Pentacnemus* p. 321 fig., MERCET Bol. Soc. Esp. H. n. **24.**

Cheiloneurus ceroplastis **sp. n.** Japan p. 103 fig., ISHII Imp. Pl. Quar. Sta. Japan Bull. **3** 1923.

Chrysopophagus variocelli **sp. n.** Queensland p. 2, GIRAULT Insec. Insc. Mens. **12.**

Clausenia **gen. n.** p. 98, *purpurea* **sp. n.** Japan p. 100 fig., ISHII Imp. Pl. Quar. Sta. Japan Bull. **3** 1923.

Echthrobaccha angeliconini **sp. n.** Queensland p. 6, GIRAULT Insec. Insc. Mens. **12.**

Epiblatticida particornis **sp. n.** Queensland p. 8, GIRAULT t.c.

Epitetracnemus auricornis **sp. n.** Queensland p. 2, GIRAULT t.c.

Eutetracera **gen. n.** (near *Calocerinus*) *ringueleti* **sp. n.** Argentina p. 4 fig., BRÈTHES Reprint from Rev. Fac. Agron. La Plata **15.**

Eutrichosomella aereiscapus **sp. n.** Queensland p. 6, GIRAULT Insec. Insc. Mens. **12.**

Leptomastidea synonymy key to ♀ ♀ p. 254, *jeanneli* **sp. n.** B. E. Afr. p. 256 figs., MERCET Bol. Soc. Esp. H. n. **24.**

Microterys speciosus p. 70, *ericeri* p. 109, **spp. n.** fig. Japan, ISHII Imp. Pl. Quar. Sta. Japan Bull. **3** 1923.

Neocopidosoma **gen. n.** (near *Copidosoma*) p. 101, *komabae* **sp. n.** fig. Japan p. 102, ISHII Imp. Pl. Quar. Sta. Japan Bull. **3** 1923.

Ovidoencyrtus **gen. n.** *pallidipes* **sp. n.** Queensland p. 7, GIRAULT Insec. Insc. Mens. **12.**

Phaenodiscoides lutheri **sp. n.** Queensland p. 6, GIRAULT t.c.

Phaenodiscus bertonii **sp. n.** Paraguay p. 11, BRÈTHES Nunquam Otiosus-ii, **1924.**

Procheiloneurus flaviscutellum **sp. n.** Queensland p. 5, GIRAULT Insec. Insc. Mens. **12.**

Synaspidia **gen. n.** p. 397, *pretiosa* **sp. n.** fig. Mexico p. 399, TIMBERLAKE Proc. Hawaiian Ent. Soc. 1923 **5.**

Trichomasthus nigricans **sp. n.** N. Italy p. 28, MASI Boll. Soc. ent. ital. **56.**

Zeteticontus perkinsi **sp. n.** Honolulu p. 402 fig., TIMBERLAKE Proc. Hawaiian Ent. Soc. 1923 **5.**

CLEONYMIDAE.

Leptofoenus identity pp. 302–304, BRUES Psyche **31**.

Paraheydenia cristatipennis **sp. n.** Queensland p. 3, GIRAULT Insec. Insc. Mens. **12**.

Pelecinella identity pp. 302–304, BRUES Psyche **31**.

PTEROMALIDAE.

Notes on Pteromalidae Spain, MERCET Bol. R. Soc. esp. Hist. nat. **24** p. 421 figs.

Amblymerus liparidis **sp. n.** fig. Br. Columbia p. 69, VIERECK Can. Ent. **56**.

Anogmoidea **gen. n.** *joulei* **sp. n.** Queensland p. 174, GIRAULT Insec. Insc. Mens. **12**.

Arthrolytus hallami **sp. n.** Queensland p. 174 GIRAULT t.c.

Dibrachys boucheanus Ratz. (= *Tritneptis hemerocampae* Gir.) p. 174, GIRAULT t.c.

Eupteromalus cognatus **sp. n.** Lake Erie p. 16, GAHAN Proc. U. S. Nat. Mus. **65** art. 4.

Eutelus typographi **sp. n.** Sweden p. 13, RUSCHKA Ent. Tidsk. **45**.

Habrocytus lixi **sp. n.** Italy p. 143, SARRA Boll. Lab. Zool. Portici 17.

Ipocoelius **gen. n.** p. 6, type *seitneri* p. 7, *rotundiventris* p. 11 **spp. n.** Sweden fig., RUSCHKA Ent. Tidsk. **45**.

Lariophagus distinguendus oviposition and change of host p. 377, HASE Naturwissenschaften **12**.

Nemicromelus fulvipes identity pp. 222-224, MYERS Proc. Ent. Soc. Wash. **26**.

Pachyneuron biological notes, FAURE Rev. Path. vég. & Ent. agric. **10** 1923 pp. 255–258; method of feeding pp. 51–53, FAURE Expos. Internat. Cent. Pasteur Strasbourg **1923**.

Pteromalus variabilis feeding habits p. 225 fig., FAURE Rev. Zool. agric. & appl. **23**.

Tritneptis hemerocampae see *Dibrachys boucheanus*.

EULOPHIDAE.

Ablerus albicaput **sp. n.** Queensland p. 2, GIRAULT Insec. Insc. Mens. **12**.

Amestocharis characters p. 93, GIRAULT t.c.

Aphelinoidea xenos **sp. n.** Honolulu p. 415 fig., TIMBERLAKE Proc. Hawaiian Ent. Soc. 1923 **5**.

Aphelinus maidis p. 405, *gossypii* p. 408, **spp. n.** fig. Hawaii, TIMBERLAKE Proc. Hawaiian Ent. Soc. 1923 **5**.—*A. sanborniae* p. 7, *jucundus* p. 8, *aureus* p. 9, *perpallidus* p. 10, **spp. n.** U.S.A., *ashmeadi* **n. n.** for *howardii* p. 11, GAHAN Proc. U. S. Nat. Mus. **65** art. 4.—*A. mali* biology 6 pp. fig., LUNDIE Cornell Univ. Agric. Expt. Sta. Mem. **79**.

Buonapartea **gen. n.** *aeniceps* **sp. n.** Queensland p. 5, GIRAULT Insec. Insc. Mens. **12**.

Ceratoneurella mediosulcata **sp. n.** Queensland p. 4, GIRAULT t.c.

Cleolophus **gen. n.** p. 461, *autonomus* **sp. n.** Spain p. 462 fig., MERCET Bol. R. Soc. esp. Hist. nat. **24**.

Diaulomyia arboris **sp. n.** Queensland p. 4, GIRAULT Insec. Insc. Mens. **12**.

Emersonopsis characters p. 93, GIRAULT t.c.

Encarsia formosa **sp. n.** Idaho p. 14, GAHAN Proc. U. S. Nat. Mus. **65** art. 4.

Euderus characters p. 94, GIRAULT Insec. Insc. Menstr. **12**.

Euplectrus seminigrifemur p. 3, *lutheri* p. 6, **spp. n.** Queensland, GIRAULT t.c.

Miromphalomyia characters p. 95, GIRAULT t.c.

Parasecodes **gen. n.** p. 54, *simulans* **sp. n.** Spain p. 55 figs., MERCET Bol. R. Soc. esp. Hist. nat. **24**.

Raphaelonia **gen. n.** (Entedoninae) *sulcatiscutum* **sp. n.** Queensland p. 173, GIRAULT Insec. Insc. Mens. **12**.

Secodella ovativentris **sp. n.** Queensland p. 172, GIRAULT t.c.

Syntomosphyrum teiae **sp. n.** Queensland p. 7, GIRAULT t.c.

Tamarixia **gen. n.** p. 57, *bicolor* **sp. n.** Spain p. 53 figs., MERCET Bol. R. Soc. esp. Hist. nat. **24**.

Tetrastichus philodromi **sp. n.** Ohio p. 18, GAHAN Proc. U.S. Nat. Mus. **65** art. 4.—*T. cyclogaster* **var. n.** *obscurata* Sweden p. 15, RUSCHKA Ent. Tidsk. **45**.—*T. vaquitarum* **sp. n.** Porto Rico p. 63, WOLCOTT J. Dept. Agric. P. R. **7**.

Trichaporus gallicola **sp. n.** fig. Paraguay p. 7, FERRIÈRE Ann. Soc. ent. Fr. **93**.

MYMARIDAE.

Cataphractus reductus **sp. n.** Russia p. 98 fig, RIMSKY-KORSAKOW Trav. Soc. Nat. Leningrad **54**, 2.

Stethynium immaculatum **sp. n.** Queensland p. 9, GIRAULT Insec. Insc. Mens. **12.**

TRICHOGRAMMATIDAE.

Megaphragma **gen. n.** p. 412, *mymaripenne* **sp. n.** fig. Hawaii p. 414, TIMBERLAKE Proc. Hawaiian Ent. Soc. 1923 **5.**

Cynipoidea.

CYNIPIDAE.

Ovipositor, reproductive organs and oviposition of Cynipidae, FRÜHAUF Zs. wiss. Zool. **121** p. 656.

Callaspidia rubricrus **sp. n.** Holland p. 126, DETTMER Natuurhist. Maandbl. **13.**—*C. dusmeti* **sp. n.** Spain p. 20 fig., TAVARES Brotéria **21.**

Cynips kollari, inquilines in galls of, pp. 114–135, FAHRINGER Konowia **3.**

Dusmetiola **gen. n.** *hispanica* **sp. n.** Spain p. 18 fig., TAVARES Brotéria **21.**

Eucoila pelleranoi **sp. n.** Argentina p. 10, BRÈTHES Nunquam Otiosus—ii, **1924.**

Figites globulosus **sp. n.** Holland p. 126, DETTMER Natuurhist. Maandbl. **13.**

Lonchidia nitens **sp. n.** Holland p. 126, DETTMER t.c.

Periclistus spinosissimae **sp. n.** Holland p. 146, DETTMER t.c.

Synergus punctatus p. 146, *fulvipes*, *mutabilis*, *inflatus* p. 147, *albifaciatus*, *carinulatus* p. 148, **spp. n.** Holland, DETTMER t.c.

Ichneumonoidea.

ICHNEUMONIDAE.

Ichneumonidae of Poland Pt. I Subfamilies Ichneumoninae and Pimplinae, BLEDOWSKI & KRAINSKA Polsk. Pismo ent. **3** pp. 37–56.

List of Ichneumonidae of Lichfield district, CARR Trans. N. Staff F. Cl. **58** Appendix sep. pp. 1–70.

The poison of Ichneumonids and its effects, HASE Biol. Zentralb. **44** p. 209 figs.

Ichneumonidae of North Schleswig, PFANKUCH Zs. wiss. Insektenbiol. **19** pp. 53–64.

Notes on various Ichneumonids, PFANKUCH Ent. Jahrb. **33-34** pp. 134–147.

Descriptions of and keys to Spanish Ichneumonids of the subfamily Joppinae, CEBALLOS Trab. Mus. Nac. Cienc. nat. Madrid **1924** 335 pp. 370 figs.

Notes and synonymy on certain of Gravenhorst's spp. of Ichneumonidae, PFANKUCH Konowia **2** 1923 pp. 93,165.

Biology of Ichneumonids, SEYRIG Ann. Soc. ent. Fr. **92** pp. 300, 345–362, 1 fig.

Absyrtus arealis, *perilissoides* **spp. n.** U.S.A. p. 19, CUSHMAN Proc. U. S. Nat. Mus. **64** art. 20.

Afromevesia **gen. n.** near *Mevesia* p. 4, type *birungana* **sp. n.** C. Africa p. 5, ROMAN Ark. Zool. **16** no. 17.

Alocerus Först. (nec Ashm.) see *Microleptes*.

Amblyteles comitis **sp. n.** C. Africa p. 3, ROMAN t.c.

Anilasta anglicana **sp. n.** England p. 37, HABERMEHL Konowia **2** 1923.

Anurotropus **gen. n.** p. 4, *minutus* **sp. n.** Michigan p. 5 fig., CUSHMAN Proc. U. S. Nat. Mus. **64** art. 4.

Apethecerus parianae **sp. n.** Japan pp. 196–256, UCHIDA Sapporo J. Soc. Agric. & Forestry **16.**

Arachnoleter **gen. n.** p. 2, *swezeyi* **sp. n.** Hawaii p. 3 fig., CUSHMAN Proc. U.S. Nat. Mus. **64** art. 4.

Atractodes longiceps **sp. n.** Novaya Zemlya p. 21, ROMAN Rept. Norw. Exp. Nov. Zeml. no. 14 1923.

Barichneumon carri **sp. n.** England p. 34, HABERMEHL Konowia **2** 1923.—*B. papilionariae* **sp. n.** Japan pp. 195–256, UCHIDA Sapporo J. Soc. Agric. & Forestry **16.**

Barytarbes britannicus **sp. n.** England p. 38, HABERMEHL Konowia **2** 1923.

Campoplex splendens ♂ described p. 145, PFANKUCH Ent. Jahrb. **31** 1922. —*C.* (*Angitia*) *basizona, cacoeciae* p. 67 Br. Columbia, *rosanae* Nova Scotia p. 68 **spp. n.**, VIERECK Can. Ent. **56**.

Carria **gen. n.** *paradoxa* **sp. n.** England p. 112, SCHMIEDEKNECHT Ent. Mo. Mag. **60**.

Ceratophygadeuon **gen. n.** p. 110, *taeniatus* **sp. n.** Quebec p. 111, VIERECK Can. Ent. **56**.

Chrysopoctonus bicolor **sp. n.** Florida p. 1, CUSHMAN Proc. U. S. Nat. Mus. **64** art. 4.

Cidaphus occidentalis p. 5, *australis* p. 6, **spp. n.** N. America figs., CUSHMAN Proc. U. S. Nat. Mus. **64** art. 20.

Collyriini **trib. n.** for *Collyria* only p. 229, CUSHMAN Proc. Ent. Soc. Wash. **26**.

Collyria systematic position p. 230, CUSHMAN t.c.

Cratichneumon fallax **sp. n.** England p. 34, *försteri* redescribed p. 40, HABERMEHL Konowia **2** 1923.

Cryptoideus bituminosus New York p. 6, *anthracinus* Connecticut p. 7, **spp. n.**, CUSHMAN Proc. U. S. Nat. Mus. **64** art. 4.

Currania **gen. n.** p. 300, *mirabilis* **sp. n.** Quebec p. 301 fig. VIERECK Can. Ent. **56**.

Dolichomastix **gen. n.** *bispinosus* **sp. n.** Kamerun p. 62 figs., CEBALLOS Bol. R. Soc. esp. Hist. nat. **24**.

Echthronomas ochreofrons **sp. n.** Virginia p. 12, CUSHMAN Proc. U. S. Nat. Mus. **64** art. 4.

Enderleinia **n. n.** for *Opheltoideus* End. (nec Ashm.) p. 6, CUSHMAN Proc. U. S. Nat. Mus. **64** art. 20.

Enicospilus ruandensis **sp. n.** C. Africa p. 8, ROMAN Ark. Zool. **16** no. 17.

Ephialtes manifestator oviposition p. 458, BAER, Zs. angew. Ent. **10**.—*E.* (*Itoplectis*) *esuchus* **n. n.** for (*I.*) *pacificus* p. 221, CUSHMAN Proc. Ent. Soc. Wash. **26**.—*E. cacoeciae* **sp. n.** Br. Columbia p. 64, VIERECK Can. Ent. **56**.

†*Exenterus dormitans* **sp. n.** Miocene Colorado p. 9, COCKERELL Entomologist **57**.

Exeristoidea **subgen. n.** see *Ichneumon*.

Exochus platensis **sp. n.** Argentina p. 10, BRÈTHES Nunquam Otiosus—ii, **1924**.—*E.*, key to Palaearctic spp. p. 103, *paradoxus* p. 104, *elegantissimus* p. 105, *suborbitalis, foveolatus, decoloratus, quadrimaculatus* p. 110, *subalpinus* p. 111, *punctifer* p. 112 Thuringia, *rubro-ater, carri* England p. 108, *separandus* Central Europe p. 109 **spp. n.** *thomsoni* **n. n.** for *crassicornis* Thoms. (nec. Grav.), SCHMIEDEKNECHT Ent. Mo. Mag. **60**.

Gambrus venablesi **sp. n.** Br. Columbia p. 65, VIERECK Can. Ent. **56**.

Gnathoniella **gen. n.** *egregia* **sp. n.** Thuringia p. 47, SCHMIEDEKNECHT Ent. Mo. Mag. **60**.

Grypocentrus cinctellus ♂ described p. 40, HABERMEHL Konowia **2** 1923.—*G. incisulus* figured p. 300, VIERECK Can. Ent. **56**.

Hemiteles areator anatomy and bionomics pp. 116–124 fig., ORLOV Défense des Plantes **1**.

Homotropus pallipes, Grav. ♂ (= *Lissonota pectoralis*, Grav. ♂) p. 42, PFANKUCH Konowia **3**.

Hoplismenus pica **var. n.** *japonicus, aquilinus* **sp. n.**, Japan pp. 195–256, UCHIDA Sapporo J. Soc. Agric. & Forestry **16**.

Hypopheltes **gen. n.** p. 11, *pergae* **sp. n.** N.S.W. p. 12 fig., CUSHMAN Proc. U.S. Nat. Mus. **64** art. 20.

Hyposoter rubiginosus **sp. n.** Connecticut p. 11, CUSHMAN Proc. U.S. Nat. Mus. **64** art. 4.

Ichneumon macrocerus Thoms. ♂ described England p. 39, HABERMEHL Konowia **2** 1923.—*I.* (*Exeristoidea* **subgen. n.**) *watsoni* **sp. n.** Quebec p. 202, VIERECK Can. Ent. **56**.

Ischnerus rusticus, notes on p. 49, *microcephalus* Grav. see *Meloboris dorsalis* Grav. p. 51, PFANKUCH Konowia **3**.

Ischnoceros systematic position p. 231, CUSHMAN Proc. Ent. Soc. Wash. **26**.

Lissonota funebris **sp. n.** England p. 41, HABERMEHL Konowia **2** 1923.—*L. pectoralis* see *Homotropus pallipes*.

Mansa longicaudata **sp. n.** Kamerun p. 14 fig., CEBALLOS Bol. R. Soc. esp. Hist. nat. **24.**

Medophron minor **sp. n.** Schleswig p. 147, PFANKUCH Zs. wiss. Insektenbiol. **19.**

†*Megatryphon* **gen. n.** p. 9, *mortiferus* **sp. n.** Miocene Colorado p. 10, COCKERELL Entomologist **57.**

Melanichneumon vilhelmi **sp. n.** C. Africa p. 2, ROMAN Ark. Zool. **16** no. 17. —*M. leucaniae* **sp. n.** Japan pp. 195–256, UCHIDA Sapporo J. Soc. Agric. & Forestry **16.**

Meloboris dorsalis Grav. (= *Ischnerus microcephalus* Grav.) p. 51, PFANKUCH Konowia **3.**

Mesoleius pictipes **sp. n.** England p. 38, HABERMEHL Konowia **2** 1923.—*M. insularis* **sp. n.** Novaya Zemlya p. 17, ROMAN Rept. Norw. Exp. Nov. Zeml. no. 14 1923.—*M.*, revision (cont.) Europe p. 2963, *holmgreni* **n. n.** for *formosus* Holmgr. & Thoms (nec Grav.) p. 2984, SCHMIEDEKNECHT Opusc. Ichn. **38.**

Microleptes Grav. (= *Alcocerus* Först. nec Ashm.) p. 47, SCHMIEDEKNECHT Ent. Mo. Mag. **60.**

Neoprotarchus **gen. n.** (near *Protarchoides*) *ater* **sp. n.** California p. 10, CUSHMAN Proc. U. S. Nat. Mus. **64** art. 20.

Nephopheltes **gen. n.** p. 16 *japonicus* **sp. n.** Japan p. 17 fig., CUSHMAN t.c.

Odontomerus stejnegeri **sp. n.** Robben Island, Okhotsk Sea p. 9, CUSHMAN Proc. U.S. Nat. Mus. **64** art. 4.

Omorgus fanensis **sp. n.** fig., Italy p. 639, CECCONI Manuale Ent. forest.

Opheltes glaucopterus **var. n.** *barberi* Maryland, *major* **sp. n.** Japan p. 16, CUSHMAN Proc. U. S. Nat. Mus. **64** art. 20.

Opheltoideus, End. (nec Ashm.) see *Enderleinia.*

Opius tryoni habits p. 187, GALLARD Austr. Nat. **5.**

Paniscus rugosus **sp. n.** Mexico p. 15, CUSHMAN Proc. U.S. Nat. Mus. **64** art. 4.—*P.*, key to N. American spp. p. 23, *pulcher* p. 25, *trituberculatus* p. 26, *brevicornis* p. 27, *caviverticalis*, *clypeatus* p. 29, *temporalis* p. 30, *pardalis* p. 31, *spinipes* p. 32, *neomexicanus*, *unguicularis* p. 33, *cockerelli* p. 35, **spp. n.**; *ocellatus* **var. n.** *microocellatus*; *californicus* p. 36, *arizonensis* p. 37, *leo* p. 38, *pallens* p. 39 (with **var. n.** *barberi*), *townsendi* p. 40, **spp. n.**, *geminatus* **var. n.** *sayi* p. 41 N. America, CUSHMAN Proc. U. S. Nat. Mus. **64** art. 20.

Parabates, key to N. American spp. p. 44, *smithi* p. 45, *cristatoides* p. 46, *crassus*, *exsertus* p. 47, **spp. n.** N. America, CUSHMAN t.c.

Pezomachus tubulosus p. 11, *maderi* p. 13, *albanicus* p. 14, **spp. n.** Albania, FAHRINGER Konowia **2** 1923.

Phaeogenes cacoeciae **sp. n.** Br. Columbia p. 66, VIERECK Can. Ent. **56.**

Phygadeuon occisor p. 35, *britannicus* p. 42, **spp. n.** England, HABERMEHL Konowia **2** 1923.—*P. sodalis* **var. n.** *niger* Schleswig p. 148, PFANKUCH Zs. wiss. Insektenbiol. **19.**

Phytodietus synonymy of many species pp. 41–49, PFANKUCH Konowia **3.**

Platylabus arcticus **sp. n.** Novaya Zemlya p. 11, ROMAN Rept. Norw. Exp. Nov. Zeml. no. 14 1923.

Protarchoides mandibularis **sp. n.** N. America p. 9 fig., CUSHMAN Proc. U. S. Nat. Mus. **64** art. 20.

Pseudocymodusa neglecta **sp. n.** England p. 36, HABERMEHL Konowia **2** 1923.

Pyracmon, keys p. 112, *rufocoxalis* **n. n.** for *pectoralis* Haberm. (nec Kriechb.) p. 125, *monachiensis* **sp. n.** no locality p. 128, *lucidus* **n. n.** for *austriacus* Strobl (nec Tschek.) p. 130, CLÉMENT D. ent. Zs. **1924.**

Spilocryptus cimbicivorus **sp. n.** S. Dakota p. 8, CUSHMAN Proc. U. S. Nat. Mus. **64** art. 4.

Stenomacrus oeklandi **sp. n.** Novaya Zemlya p. 15, ROMAN Rept. Norw. Exp. Nov. Zeml. no. 14 1923.

Thalessa leucographa structure and oviposition p. 149 figs., BAUMANN Zool. Anz. **58.**

Triclistus notes p. 103, SCHMIEDEKNECHT Ent. Mo. Mag. **60.**

Trogus jezoensis **sp. n.** Japan pp. 195–256, UCHIDA Sapporo J. Soc. Agric. & Forestry **16.**

Tryphonides, keys to tribes and genera pp. 45 & 103, SCHMIEDEKNECHT Ent. Mo. Mag. **60.**

Xiphosomella stenomae **sp. n.** Panama p. 14, CUSHMAN Proc. U. S. Nat. Mus. **64** art. 4.

BRACONIDAE.

Synonymy and notes on South African Braconidae, BRUES Ann. S. Afr. Mus. **19** p. 11.

Notes on British Braconidae, LYLE Entomologist **57** p. 11.

Key to genera and notes on British Dacnusides, MORLEY Entomologist **57** pp. 193 & 250.

Key to genera of Hecabolinae, SCHMIEDEKNECHT Meded. Koffiebessenboeboek-Fonds no. **9** p. 202.

Acrophasmus amazonicus **sp. n.** Brazil p. 35, ROMAN Ark. Zool. **16** no. 20.

Apanteles nigerrimus **sp. n.** Novaya Zemlya p. 19, ROMAN Rept. Norw. Exp. Nov. Zeml. no. 14 1923.

Archibracon cameroni **n. n.** for *Exothecus flaviceps* Cam. (nec *Archibracon flaviceps* Brullé) p. 78, BRUES Ann. S. Afr. Mus. **19.**

Ascogaster key p. 64, LYLE Entomologist **57.**—*A. bipustulata* **sp. n.** Zululand p. 105, BRUES t.c.

Bacuma (= *Trachybracon* Szép.) key S. Africa p. 72, BRUES t.c.

Binarea rufipes **sp. n.** Brazil p. 8, ROMAN Ark. Zool. **16** no. 20.

Bracanastrepha **gen. n.** near *Chelonogastra* Ashm., *argentina* **sp. n.** p. 8 Argentina, BRÈTHES Nunquam Otiosus —ii, **1924.**

Braunsia mimetica p. 88, *excelsa* p. 89, **spp. n.** Natal, BRUES Ann. S. Afr. Mus. **19.**

Bracon pulcher p. 35, *conjugellae* p. 36, **spp. n.** Sweden, BENGTSSON Ent. Tidsk. **45.**—*B. guanicana* **sp. n.** Porto Rico p. 67, WOLCOTT J. Dept. Agric. P. R. **7.**

Cardiochiles key p. 92, *latifrons* p. 93, *angustifrons* p. 94, *striatus* p. 95 *nitidus* p. 96, *fossatus* p. 97, *longipennis* p. 98, *tegularis* p. 100, **spp. n.** S. Africa, BRUES Ann. S. Afr. Mus. **19.**

Chaoilta amplificata **sp. n.** Zululand p. 66, BRUES t.c.

Chelonogastra key, *rotundula* p. 73, *elongatula* p. 74, *orbiculata* p. 75, **spp. n.** S. Africa, BRUES t.c.

Chelonus basalis Curtis ♂ described p. 64, LYLE Entomologist **57.**

Coeloides anastrephae **sp. n.** Argentina p. 7, BRÈTHES Nunquam Otiosus—ii, **1924.**

Concurtisella **gen. n.** near *Curtisella* p. 36, type *bidens* **sp. n.** Brazil p. 37, ROMAN Ark. Zool. **16** no. 20.

Cremnops zululandensis p. 90, *obsolescens* p. 91, **spp. n.** S. Africa, BRUES Ann. S. Afr. Mus. **19.**

Curtisella ephialtoides **sp. n.** Brazil p. 39, ROMAN Ark. Zool. **16** no. 20.

Dacnusa key p. 195, *nemesis*, *naenia*, *lar* p. 197, *apollyon* p. 250, **spp. n.** Br. Isles, MORLEY Entomologist **57.**

Disophrys key p. 83, *picturata* p. 84, *pedalis* p. 85, **spp. n.** S. Africa, BRUES Ann. S. Afr. Mus. **19.**

Doryctocephalus platynotus see *Platybracon planinotus.*

Euagathis terebrator **sp. n.** Natal p. 86, BRUES t.c.

Euurobracon mandibularis **sp. n.** Natal p. 34, BRUES t.c.

Exothecus flavipes Cam. see *Archibracon cameroni.*

Gyroneuron africanum **sp. n.** Zululand p. 82, BRUES t.c.

Habrobracon juglandis habits and senses p. 313 fig., SCHULZE Zool. Anz. **59**; movements of antennae p. 122 figs., *id.* op. cit. **61.**—*H. johannseni* oviposition pp. 46–48, TROUVELOT Expos. Internat. Cent. Pasteur Strasbourg Juin–Oct. **1923.**—*H. juglandis*, defective and freak venation WHITING Univ. Iowa Studies in Child Welfare **3** no. 1, 80 pp.

Helorimorpha (= *Stictometeorus* Cam.) key, *africana* p. 101, *coffeae* p. 103, **spp. n.** S. Africa, BRUES Ann. S. Afr. Mus. **19.**

Heratremis longicornis **sp. n.** Zululand p. 112, BRUES t.c.

Heterospilus coffeicola **sp. n.** Uganda p. 204 fig., SCHMIEDEKNECHT Meded. Koffiebessenboeboek-Fonds no. **9.**

Hormiopterus capensis **sp. n.** Cape Town p. 15, BRUES Ann. S. Afr. Mus. **19.**

Ichneutes liosternus **sp. n.** Novaya Zemlya p. 18, ROMAN Rept. Norw. Exp. Nov. Zeml. no. 14 1923.

Iphiaulax key p. 37, *phosphor* p. 42, *minyas* p. 43, *proserpina* p. 44, *hesper* p. 45, *iris* p. 47, *aurora* p. 48, *diana* p. 49, *minerva* p. 50, *bellona* p. 52, *juno* p. 53, *lucina* p. 54, *iphigenia* p. 55, *vesta* p. 56, *pandora* p. 57, *thisbe* p. 58, *rhadamanthus* p. 59, **spp. n.** S. Africa, BRUES Ann. S. Afr. Mus. **19.**

Liobracon propodealis Brazil p. 10, *pseudomacula* Argentina p. 11, *scholzi* Brazil p. 13 **spp. n.** fig., ROMAN Ark. Zool. **16** no. 20.

Macrocentrus nigridorsis **sp. n.** Manitoba p. 68, VIERECK Can. Ent. **56.**

Megistoproctus joachimi p. 19, *debilis* p. 21 Brazil, *marcapatanus* Peru p. 22, *autazicus* p. 23, *opaculus* p. 24 Brazil, **spp. n.,** ROMAN Ark. Zool. **16** no. 20.

Mesobracon fenestratus **sp. n.** Nigeria p. 78, BRUES Ann. S. Afr. Mus. **19.**

Microbracon key p. 18, *annulicornis* p. 20, *latifasciatus* p. 22, *hieroglyphicus* p. 23, *jonesi* p. 24, *zuluorum* p. 25, *curticornis* p. 26, *postfurcalis* p. 28, *tuckeri* p. 29, *praeceptor* p. 30, *ceres* p. 31, *monitor* p. 32, *sectator* p. 33, **spp. n.** S. Africa, BRUES t.c.

Neontsira **gen. n.** (near *Ontsira*) p. 124, *typica* **sp. n.** Assam p. 125, ROHWER Rec. Ind. Mus. **26.**

Nervellius **gen. n.** (near *Odontobracon*) *subdivisus* **sp. n.** Brazil p. 5 fig., ROMAN Ark. Zool. **16.** no. 20.

Odontobracon amazonicus Brazil p. 14, *batesi* Brazil ? p. 15 **spp. n.** fig., ROMAN t.c.

Odontogaster key p. 69, *uniformis* **sp. n.** Zululand p. 70, BRUES Ann. S. Afr. Mus. **19.**

Pachychelonus **gen. n.,** *fulviventris* **sp. n.** Rhodesia p. 107, BRUES t.c.

Pambolus aciculatus **sp. n.** Cape Town p. 17, BRUES t.c.

Perilitus key p. 103, *latus, angustus* **spp. n.** S. Africa p. 104, BRUES t.c.

Phanerotoma bilinea **sp. n.** England p. 101 figs., LYLE Entomologist **57.**

Platybracon planinotus **n. n.** for *Doryctocephalus platynotus* Cam. 1909 (nec *Iphiaulax platynotus* Cam. 1904) p. 68, BRUES Ann. S. Afr. Mus. **19.**

Plaxopsis nitidula **sp. n.** Durban p. 64, BRUES t.c.

Protapanteles marquesi **sp. n.** Brazil p. 7, BRÈTHES Nunquam Otiosus—ii, **1924.**

Rhizarcha key p. 251, *alecto* p. 252, *nox* p. 253, **spp. n.** England and Ireland, MORLEY Entomologist **57.**

Rhogas pictipennis **sp. n.** Rhodesia p. 80, BRUES Ann. S. Afr. Mus. **19.**

Sigalphus key *simplicifrons* **sp. n.** Transvaal p. 109, BRUES t.c.

Spathiohormius dentatus **sp. n.** Zululand p. 14, BRUES t.c.

Spathius striaticeps p. 11, *laeviceps* p. 13, **spp. n.** S. Africa, BRUES t.c.

Stictometeorus Cam. see *Helorimorpha.*

Subcurtisella **gen. n.** (near *Curtisella*) p. 33, type *waterstoni* **sp. n.** Brazil p. 34, ROMAN Ark. Zool. **16** no. 20.

Trachybracon Szép. see *Bacuma.*

Trigonophasmus spathiipennis p. 28, *insignis* p. 30, *fuscipennis* p. 31, *huebneri* p. 32, **spp. n.** Brazil fig., ROMAN Ark. Zool. **16** no. 20.

Trioxys (*aceris* ?) oviposition pp. 353–363 fig., EIDMANN Zs. angew. Ent. **10.**—*T. pulcher* **sp. n.** France p. 43, GAUTIER & BONNAMOUR Bull. Soc. ent. Fr. **1924.**

EVANIIDAE.

Synonymy and notes on S. African Evaniidae, BRUES Ann. S. Afr. Mus. **19** p. 2.

Evania rufiscapa **sp. n.** Zululand p. 9, BRUES t.c.

Gasteruption fuscipenne p. 4, *peringueyi* p. 5, *fossatum* p. 6, **spp. n.** S. Africa, BRUES t.c.

Odontaulacus africanus **sp. n.** Cape Province p. 2, BRUES t.c.

Trichofoenus pedicellatus **sp. n.** Zululand p. 7, BRUES t.c.

Tenthredinoidea.

TENTHREDINIDAE.

Abia kozhevnikovi **sp. n.** Turkestan p. 95, ZHELOCHOVTSEV Ent. Mitt. **13.**

Dolerus rufogeniculatus **sp. n.** Turkestan, *rugosus* Freym. (= *porcatus* Knw.) p. 96 fig., ZHELOCHOVTSEV t.c.

Eriocampoides matsumotonis ♀ described Japan p. 214, ROHWER J. Wash. Acad. Sci. **14.**

Hoplocampa pyricola **sp. n.** Japan p. 215, ROHWER t.c.

Odontophyes bicoloripes **sp. n.** Mississippi p. 215, ROHWER Proc. Ent. Soc. Wash. **26.**

Pelmatopus anemones **sp. n.** Germany p. 239 fig., HERING Zs. Morph. Oekol. Tiere **2.**

Pristiphora sareptana, similis **spp. n.** Russia p. 11, KUZNETZOV Ent. Mitt. **13.**—*P. pallipes* sexes p. 391 figs., PEACOCK Bri. J. Exptl. Biol. **1.**

Serysta pareyssi in Bulgaria, biology, p. 117, MOKRZECKI Trav. Soc. bulg. Sci. nat. **9** 1915.

Tenthredo interjecta **sp. n.** Russia p. 11, KUZNETZOV Ent. Mitt. **13.**

Tomostethus juncivorus **sp. n.** Japan p. 213, ROHWER J. Wash. Acad. Sci. **14.**

PROTOHYMENOPTERA.

†Protohymenoptera **n. ord., famm. n.** Protohymenidae p. 112, Asthenohymenidae p. 117 Lower Permian Kansas figs., TILLYARD Amer. J. Sci. **8.**

†*Asthenohymen* **gen. n.** p. 117, *dunbari* **sp. n.** p. 118 Lower Permian Kansas figs., TILLYARD t.c.

†*Permohymen* **gen. n.** p. 115, *schucherti* **sp. n.** p. 116, Lower Permian Kansas figs., TILLYARD t.c.

†*Protohymen* **gen. n.** p. 113, *permianus* **sp. n.** p. 114 Lower Permian Kansas figs., TILLYARD t.c.

DIPTERA.

Records of Diptera from Lancashire and Cheshire, BRITTEN Lancs. Ches. Nat. **17** pp. 22–28.

Notes on Diptera from Spitzbergen and Jan Mayen I., COLLIN Ann. Mag. N. H. (9) **14** pp. 201, 204.

Remarks on the phylogeny and interrelationships of Nematocerous Diptera, CRAMPTON Psyche **31** pp. 238–242.

Taxonomic and synonymic tendencies with especial reference to Diptera, CURRAN 54th Ann Rept. Ent. Soc. Ontario **1923** pp. 20–24.

The availability of certain taxonomic characters and their significance in Diptera, CURRAN Psyche **31** pp. 167–169.

Sex-relations in Diptera, GRUHL Zs. wiss. Zool. **122** p. 205.

Additions to the list of Diptera of Somerset, JERMYN Proc. Somerset Archaeol. N. H. Soc. **68** 1923 p. 108.

Revisions of various genera of Australian Diptera, MALLOCH Proc. Linn. Soc. N.S.W. **49** pp. 329, 348 figs.

Addenda and corrigenda to "Studien über südostasiatische Dipteren XIV," DE MEIJERE Tijd. Ent. **67** p. 198.

List of blood-sucking Diptera of Venezuela, NUÑEZ TOVAR Trab. Contrib. 4° Cong. Venez. Med. **1924** 14 pp.

Mosquitos and sandflies of Venezuela, NUÑEZ TOVAR Trab. Contrib. 4° Cong. Venez. Med. **1924** 46 pp. fig.

Radial venation in the Brachycera, SHANNON & BROMLEY Ins. Insc. Mens. **12** pp. 137–140 2 pls.

A review of the Diptera of German East Africa, SPEISER Beitr. aus der Tierk. pp. 90–156.

Catalogue of Diptera of Hungary, THALHAMMER Fauna Regni Hung. Dipt. **1918** pp. 5–76.

Diptera collected in S. Tunis by Gauthier 1923, VILLENEUVE & GAUTHIER Bull. Soc. Hist. nat. Afr. N. **15** pp. 67–70.

CECIDOMYIIDAE.

List of new British Cecidomyiidae, BAGNALL & HARRISON Ent. Rec. **36** pp. 36, 53, 99.

New and rare Cecidomyiidae in Britain, HARRISON Entomologist **57** p. 6.

Intestinal and other notes on Cecidomyiid larvae, WEHRMEISTER Zool. Jahrb. Abt. System. **49** p. 299 figs.

Arthrocnodax wissmanni **sp. n.** Germany p. 90, KIEFFER Broteria **21.**

Catocha subobsoleta Washington p. 82, *nipponensis* Japan p. 83, **spp. n.,** ALEXANDER Ins. Insc. Mens. **12.**

Crespiniella **gen. n.** *sahariensis* **sp. n.** Algeria p. 88, KIEFFER Broteria **21.**

Dasyneura leguminicola antennae pp. 415–418, WEHRLE Ann. Ent. Soc. Amer. **17.**

Diarthronomyia hypogaea biology 50 pp. fig., HAMILTON Maryland Agric. Expt. Sta. Bull. **269.**

Dictyomyia salsolae **sp. n.** Spain p. 42, TAVARES Broteria **21.**

Gillotiella **gen. n.** *carnea* **sp. n.** Alsace p. 87, KIEFFER Broteria **21.**

Misospatha salsolae **sp. n.** Spain p. 44, TAVARES Broteria **21.**

Oligarces, sex arising from larvae produced by paedogenesis, pp. 148–154, HARRIS Psyche **31.**

Perrisia raphanistri oviposition p. 91, *strobi* redescribed p. 93, TAVARES Broteria **21.**

Polystepha titi-livii **sp. n.** Spain p. 38 fig., TAVARES t.c.

MYCETOPHILIDAE.

Notes on the types of Mycetophilidae described by Mr. E. Brunetti, EDWARDS Rec. Ind. Mus. **26** pp. 291–295.

Notes on Meigen's fungus-gnat types, EDWARDS Encyc. ent. Dipt. **1** p. 12.

Notes on and changes in nomenclature for the types of Mycetophilidae described by Staeger and Zetterstedt, EDWARDS Ent. Tidsk. **45** pp. 160–168.

Synonymy and corrections in Mycetophilidae from Spitsbergen, EDWARDS Ann. Mag. N. H. (9) **14** p. 162.

The Winnertz Collection of Sciaridae at Bonn, LENGERSDORF Wiener ent. Ztg. **41** pp. 6–12.

Acnemia longipes ♂ Esthonia p. 79 fig., LANDROCK Zool. Anz. **58.**—*A. asiatica* **sp. n.** Ceylon p. 376, SENIOR-WHITE Spolia Zeylanica **12.**

Anatella dampfi **sp. n.** Esthonia p. 80 figs., LANDROCK Zool. Anz. **58.**

Arachnocampa **gen. n.** type *Bolitophila luminosa* Skuse New Zealand p. 177, EDWARDS Ann. Mag. N. H. (9) **14.**

Austrosciara **gen. n.** p. 1, *termitophila* **sp. n.** Australia p. 2 fig., SCHMITZ & MJÖBERG Ark. Zool. **16** no. 9.

Boletina montanus p. 163, *astacus* p. 164, *anticus* p. 165, *antomus, shermani* p. 166, *jucunda* p. 167, *differens* Br. Columbia, *unusus* Ithaca p. 168, **spp. n.,** GARRETT Ins. Insc. Mens. **12.**—*B. flaviventris* ♂ Esthonia p. 77 figs., LANDROCK Zool. Anz. **58.**—*B. landrocki* **nom. n.** (*analis* Landr.), EDWARDS Encyc. ent. Dipt. **1** p. 17.

Bolitophila luminosa Skuse see *Arachnocampa.*

Ceroplatus rufus **sp. n.** Java p. 206, DE MEIJERE Tijd. Ent. **67.**

Cratyna notes p. 87, *longicubitalis* **sp. n.** Germany p. 88, LENGERSDORF Wiener ent. Ztg. **41.**

Delopsis sartrix **sp. n.** Java p. 207 fig., DE MEIJERE Tijd. Ent. **67.**—*D. greenwoodi* **sp. n.** Fiji p. 570, EDWARDS Ann. Mag. N. H. (9) **14.**—*D.,* key to Indian spp p. 378, *bilunulata* **sp. n.** Ceylon p. 379 fig., SENIOR-WHITE Spolia Zeylanica **12.**

Diomonus esakii **sp. n.** Japan p. 54, ALEXANDER Ins. Insc. Mens. **12.**

Epicypta testata **n. n.** for *trinotata,* Winn. p. 167, EDWARDS Ent. Tidsk. **45.**

Exechia cristatoides **sp. n.** Ceylon p. 377, SENIOR-WHITE Spolia Zeylanica **12.**—*E. dizona* **n. n.** for *bicincta,* Lundst. p. 166, EDWARDS Ent. Tidsk. **45.**

Leia albicincta **sp. n.** Sumatra p. 2, DE MEIJERE Tijd. Ent. **67** Suppl.

Leiomyia (*Rhymoleia* **subgen. n.**) *fijiana* **sp. n.** Fiji p. 570, EDWARDS Ann. Mag. N. H. (9) **14.**

Macrocera ephemeraeformis **sp. n.** Japan p. 53, ALEXANDER Ins. Insc. Mens. **12.**—*M. egregia* **sp. n.** Sumatra p. 3, DE MEIJERE Tijd Ent. **67** Suppl.—*M. estonica* **sp. n.** Esthonia p. 79 fig., LANDROCK Zool. Anz. **58.**—*M. frigida* **sp. n.** Novaya Zemlya p. 4, SACK Rept. Norw. Exp. Nov. Zeml. no. 15 1923.

Mycomyia terminata p. 60, *cranbrooki* p. 61, *caulfieldi*, *humidus* p. 62, *vulgaris* p. 63, *magna*, *ampla* p. 64, *polleni*, *difficilis* p. 65, *shermani* p. 66, *atus* p. 159, *autumnalis*, *hamatus* p. 160, *echinata* p. 161, *durus* p. 162, *armata* p. 163, *oviducta* p. 164, **spp. n.** Canada, GARRETT Ins. Insc. Menst. **12.**—*M. pectinifera* **n. n.** for *nigricornis*, Dz., *melanoceras* **n. n.** for *nigricornis*, Lundst. p. 162, EDWARDS Ent. Tidsk. **45.**

Phorodonta pacifica **sp. n.** Fiji p. 569, EDWARDS Ann. Mag. N. H. (9) **14.**

Phronia egregia **var. n.** *melaena* Spitsbergen p. 164, EDWARDS Ann. Mag. N. H. (9) **14.**—*P. palustris* **sp. n.** Esthonia p. 80 figs., LANDROCK Zool. Anz. **58.**

Platyroptilon, *Platyura talaroceroides* Sen.-White transferred to, p. 375, SENIOR-WHITE Spolia Zeylanica **12.**

Platyura talaroceroides see *Platyroptilon*—*P. tripunctata* **sp. n.** Ceylon p. 375, SENIOR-WHITE Spolia Zeylanica **12.**

Rhymoleia **subgen. n.** see *Leiomyia.*

Sciara distigma **sp. n.** Fiji p. 568, EDWARDS Ann. Mag. N. H. (9) **14.**

Sciophila dziedzickii **n. n.** for *thoracica*, Dz. p. 165, EDWARDS Ent. Tidsk. **45.**

Trichonta adunca **n. n.** for *fissicauda* Lundst. p. 164, EDWARDS Ent. Tidsk. **45.**

BIBIONIDAE.

Aldrovandiella phaconeura **sp. n.** Kilimanjaro p. 84 fig., SPEISER Schr. physik. Ges. Königsberg **61–62** 1921.

Bibio lacteipennis (with **var. n.** *nigrita*) **sp. n.** Canada p. 250, CURRAN Can. Ent. **56.**—*B. sumatranus* p. 3, *depressus* p. 4, **spp. n.** Sumatra, DE MEIJERE Tijd. Ent. **67** Suppl.—*B. lautaretensis* **sp. n.**, *johannis* **var. n.** *jacobi*, Switzerland p. 5, VILLENEUVE Encyc. ent. Dipt. **1.**

Dilophus nigriventris ♂ p. 215, DE MEIJERE Tijd. Ent. **67.**

Holoplagia brauni **sp. n.** Brazil p. 82, SPEISER Schr. physik. Ges. Königsberg **61–62** 1921.

Scatopse zeylanica **sp. n.** Ceylon p. 380 fig., SENIOR-WHITE Spolia Zeylanica **12.**

Swammerdamella albimana, *approximata* **spp. n.** Fiji p. 571, EDWARDS Ann. Mag. N. H. (9) **14.**

SIMULIIDAE.

Contributions to the knowledge of Danish Simuliidae with keys and biological and morphological notes, PETERSEN D. kgl. Vidensk. Selsk. Skrifter, Naturv. Math. Afd. (8) **5** no. 4 pp. 237–339 2 pls. 54 figs.

Cnetha lapponica, *heymonsi* p. 213, *trabeata* p. 214, **spp. n.** Palaearctic reg., *costata* (= *annulus*) p. 214, ENDERLEIN SB. Ges. natf. Freunde **1920** 1921.—*C. aurea* ♂ (= *angustitarsis* Lunds.), *kerteszi* **var. n.** *melanobrachium* p. 47, ENDERLEIN in DAMPF SB. Naturf.-Ges. Univ. Dorpat **31.**

Nevermannia angustifrons, *tristrigata*, *bulgarica* **spp. n.** Palaearctic reg. p. 213, ENDERLEIN SB. Ges. natf. Freunde **1920** 1921.

Odagmia specularifrons, *wilhelmiana*, *angustimanus* **spp. n.** Palaearctic reg. p. 217, ENDERLEIN t.c.

Schönbaueria **gen.n.** p. 214, *tömösvaryi*; *matthiesseni* genotype p. 215, *peetsi* p. 216, **spp. n.** Palaearctic reg., ENDERLEIN t.c.

Simulium, notes on some European pp. 29–34, EDWARDS Ent. Tidsk. **45.**—*S. laciniatum* **sp. n.** Fiji p. 572, EDWARDS Ann. Mag. Nat. Hist. (9) **14.**—*S. begbunaricum* p. 65, *brnizense* p. 66, **spp. n.** Serbia fig., BARANOV Glasnik Minist. Pojoprivreda i Voda **2.**—*S. latimanus*, *schönbaueri* p. 218, *heidenreichi*, *alternans* p. 219, *parvum*, *montanum* p. 221, *tenuifrons*, *tenuimanus* p. 222, *transcaspium* p. 223, *ochrescentipes* p. 224, **spp. n.**, *reptans* L. redescribed p. 220, Palaearctic reg., ENDERLEIN SB. Ges. natf. Freunde **1920** 1921.

Wilhelmia jalcula [error for *falcula*]; *dahlgrüni* **spp. n.** Palaearctic reg. p. 214, ENDERLEIN SB. Ges. natf. Freunde **1920** 1921.

BLEPHAROCERIDAE.

Larval & pupal structure and phylogeny of Blepharoceridae, BISCHOFF Zool. Anz. **60** p. 231 figs.

Revision, biology and key to Tasmanian Blepharoceridae, TONNOIR Ann. Biol. lacustre **13** p. 5 figs.

Structure of mouth-parts of Blepharocerids, VIMMER Ceskosl. ent. spol. Jub. Sbornik **1924** pp. 136–143 fig.

Blepharocera esakii **sp. n.** Japan p. 52, ALEXANDER Ins. Insc. Mens. **12.**

Edwardsina keys p. 28, *tasmaniensis* p. 31, *similis* p. 40, *confinis* p. 47, *ferruginea* p. 50, *fluviatilis* p. 58, *montana* p. 64, **spp. n.** Tasmania biology p. 5 figs., TONNOIR Ann. Biol. lac. **13.**

Liponeura notes on palaearctic p. 253, *belgica* **sp. n.** Belgium p. 257 **58** figs.; *brevirostris* var. *hetschkoi* Bisch. (= *cordata* Vimmer) p. 280 **59,** BISCHOFF Zool. Anz.—*L. belgica* biology Belgium p. 109 figs., GOETGHEBUER Ann. Biol. lac. **13.**—*L. cinerascens, brevirostris* biology p. 713, HUBAULT C. R. Acad. Sci. Paris **179.**

DEUTEROPHLEBIIDAE.

Deuterophlebia biology Altai mountains p. 45 figs., PULIKOVSKY Trans. Ent. Soc. Lond. **1924.**

CHIRONOMIDAE.

Synonymy and corrections Chironomidae of Spitsbergen, EDWARDS Ann. Mag. N. H. (9) **14** p. 162 figs.

Ceratopogoninae as ectoparasites of Neuroptera, FORSIUS Not. ent. **4** pp. 98–99.

Larvae of Chironomidae in Novaya Zemlya, LENZ & THIENEMANN Rept. Norw. Exp. Nov. Zeml. no. 3 1922 pp. 1–8.

Notes on the Tanypinae, MUELLER Verh. zool.-bot. Ges. Wien **73** pp. 98–111 27 figs.

Acanthoconops myersi **sp. n.** N. Zealand p. 443 fig., TONNOIR Bull. Ent. Res. **14.**

Acricotopus crassicorpus p. 266, *javanus, albicoma* p. 267, **spp. n.** Java, KIEFFER Ann. Soc. sci. Bruxelles C. R. **43.**

Allochironomus crassiforceps **sp. n.** Europe p. 86, KIEFFER op. cit. Mem. **42.**

Amblycladius **gen. n.** p. 4, *subplumosus* **sp. n** Novaya Zemlya p. 5 fig., KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 9 1923.

Ankistrodactylus corsoni **sp. n.** Gold Coast p. 182 fig., INGRAM & MACFIE Bull. Ent. Res. **15.**

Apelma, sexual dimorphism, Brazil p. 133 figs., SAUNDERS Ent. Mo. Mag. **60.**

Atrichopogon cavernarum **sp. n.** Assam p. 107, EDWARDS Rec. Ind. Mus. **26.**—*A. hirsutipennis* male described p. 179, *stannusi* **sp. n.** Gold Coast and Nyasaland p. 181 fig., INGRAM & MACFIE Bull. Ent. Res. **15.**—*A. atriscapula* p. 63, *callipotami* p. 65, **spp. n.** Egypt fig., MACFIE Bull. Ent. Res. **15.**

Bauseia **subgen. n.** see *Corynoneura.*

Bezzia taeniata **var. n.** *boiemica* Bohemia p. 73, KIEFFER Ann. Soc. sci. Bruxelles Mem. **42** 1923.

Brillia arcuata **sp. n.** Westphalia, p. 160, KIEFFER t.c.

Calopsectra viridicauda, nympha p. 107, *cornutifrons, quinaria* p. 108, *luticola* p. 109, *quadrivalva* Germany, *pentamerus* p. 110 France **spp. n.,** KIEFFER t.c.

Camptochironomus insertus Java p. 262, *clarinervis* Germany, p. 392 **spp. n.,** KIEFFER op. cit. C. R. **43.**

Camptocladius key p. 20, *pumilio* **var. n.** *tenuinervis; septentrionalis, brachytomus* p. 21, *gelidus, novae-semliae* p. 22 **spp. n.** Arctic figs., KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 2 1922.—*C. verticillatus* p. 149, *fischeri* p. 150, *longiseta* p. 152 Germany, *constrictus* Bohemia p. 151, *italicus* Italy p. 152 **spp. n.,** *pentaplastus* **var. n.** *prolongatus* Schleswig-Holstein p. 151, KIEFFER Ann. Soc. sci. Bruxelles Mem. **42** 1923. —*C. microtomus* Algeria p. 261, *hexalobus* Germany p. 395 **spp. n.,** KIEFFER op. cit. C. R. **43.**

Cardiocladius Kieff. described and compared with *Thalassomyia* Schin. p. 204, *fuscus* redescribed p. 205, *capucinus* Zett. transferred from *Chironomus* p. 206, EDWARDS Ent. Mo.

Mag. **60.**—*C. nitidus* **sp. n.** Java p. 266, KIEFFER Ann. Soc. sci. Bruxelles C.R. **43.**—*C.*, early stages Britain p. 227 figs., SAUNDERS Ent. Mo. Mag. **60.**

Chironomus candidibasis **sp. n.** Fiji p. 573, EDWARDS Ann. Mag. N. H. (9) **14.**—*C. coracellus* **sp. n.** Novaya Zemlya p. 4, KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 2 1922.—*C. binodulus* p. 74, *restrictus* p. 75, *ochrocoma* p. 76, *subrectus*, *lenzi* p. 77, *curtibarba* Germany, *zavreli* p. 78 Bohemia, *brevibarba* Algeria p. 75 **spp. n.**, KIEFFER Ann. Soc. sci. Bruxelles Mem. **42** 1923.—*C. leucolabis* Kieff. see *Lenzia.*—*C. albomarginatus* Cape Colony p. 260, *javanus* Java p. 263, **spp. n.**, KIEFFER op. cit. C. R. **43.**—*C. pulchripes* **sp. n.** Sumatra p. 4, DE MEIJERE Tijd. Ent. **67** Suppl.—*C. capucinus* Zett. see *Cardiocladius.*—*C. bergrothi* Kieff. see *Lundströmiella.*—*C. flavoviridis* Lundstr. see *Paratendipes* Kieff.—*C. clavaticrus* see *Zavreliella.*—*C.* spp. see *Endochironomus.*

Cladopelma sinuosa **sp. n.** Germany p. 393, KIEFFER op. cit. C.R. **43.**

Cladotanytarsus pallidus **sp. n.** p. 100, **var. n.** *longipalpis* p. 102 Bohemia, KIEFFER Ann. Soc. sci. Bruxelles Mem. **42** 1923.

Clinotanypus pictidorsum **sp. n.** Java p. 269, KIEFFER t.c.

Corynoneura subgenn. *Thienemanniella*, *Corynoneura* redescribed, (*T.*) *majuscula* p. 183, *lutea*, *vittata* p. 184, *morosa* p. 185 **spp. n.**, *clavicornis* redescribed p. 184, (*C.*) *celtica*, *lobata* p. 186, *lacustris*, *coronata* p. 187, *carriana* **spp. n.**, *innupta* Edw. p. 188, *celeripes* Winn. p. 187 redescribed Britain figs., EDWARDS Ent. Mo. Mag. **60.**—*C.* (*Bauseia* **subgen. n.**) *antennalis* **sp. n.** Bohemia p. 166, KIEFFER Ann. Soc. sci. Bruxelles Mem. **42** 1923.—*C.* (*Thienemanniella*) *longipalpis* **sp. n.** Westphalia p. 165, ID. t.c.—*C. arctica* **sp. n.** Novaya Zemlya p. 4, KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 9 1923.

Crespinia **gen. n.** *brevipalpis* **sp. n.** Java p. 141, KIEFFER Ann. Soc. sci. Bruxelles C.R. **43.**

Cricotopus lacustris p. 147, *stenopelma* Germany, *boiemicus* Bohemia, p. 148, **spp. n.**, KIEFFER Ann. Soc. sci. Bruxelles Mem. **42** 1923.

Cryptochironomus superatus p. 83, *defectiforceps*, *transversalis* p. 84, *laccophilus*, *angularis* p. 85, *inornatus* p. 86, **spp. n.** Germany, KIEFFER t.c.—*C. javae*, *apicalis* **spp. n.** Java p. 264, KIEFFER op. cit. C.R. **43.**

Culicoides concitus **sp. n.** Thuringia p. 71, KIEFFER Ann. Soc. sci. Bruxelles Mem. **42** 1923.—*C. pulicaris*, buccal armature and salivary pump pp. 17–22, fig., LEON Bull. Soc. sci. Acad. Roumaine **9.**—*C. distinctipennis* **var. n.** *egypti* Egypt p. 66, MACFIE Bull. Ent. Res. **15.**

Dactylocladius key p. 15, *aurantiacus*, *microcomus* **spp. n.** Arctic p. 16, KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 2 1922.—*D. rhabani*, *pentachaetus* **spp. n.** Westphalia p. 141, KIEFFER Ann. Soc. sci. Bruxelles Mem. **42** 1923.—*D. gelidorum*, *longiseta*, *griseipennis* **spp. n.** Novaya Zemlya p. 6, KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 9 1923.

Dasyhelea curticoma p. 138, *longicoma*, *heurni* p. 139, **spp. n.** Java, KIEFFER Ann. Soc. sci. Bruxelles C.R. **43.**

Diamesa punctata **sp. n.** Novaya Zemlya p. 8, KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 9 1923.

Dicrotendipes key to African p. 259, *speciosus* p. 256 Algeria, *peringueyanus* p. 257 Cape Colony **spp. n.**, KIEFFER Ann. Soc. sci. Bruxelles C.R. **43.**

Ditanytarsus unicolor Bohemia p. 98, *algarum* Schleswig-Holstein p. 99 **spp. n.**, KIEFFER op. cit. Mem. **42** 1923.

Einfeldia pectoralis **sp. n.** Germany p. 393, KIEFFER op. cit. C.R. **43.**

Endochironomus occultus **sp. n.** Bohemia, *Chironomus* spp. and *Glyptotendipes meinerti* Kieff. transferred to, p. 80, KIEFFER op. cit. Mem. **42** 1923.

Eurycnemus elegans **var. n.** *bifidus* Hungary p. 167, KIEFFER op. cit. Mem. **42** 1923.

Fleuria **gen. n.** p. 390, type *lacustris* **sp. n.** Germany p. 391, KIEFFER op. cit. C.R. **43.**

Forcipomyia radicicola p. 208, *pulchrithorax* p. 209, **spp. n.** England, EDWARDS Parasitology **16.**—*F. eques* note p. 97, EDWARDS Not. ent. **4.**—

F., key to African species p. 541, *biannulata* Gold Coast, Nigeria, Nyasaland p. 557, *auripes* p. 560, *squamipennis* p. 562, *lepidota* p. 566, *venusta* p. 569, *pampoikila* p. 570, *nigrotibialis* p. 571, **spp. n.**, *inornatipennis* **var. n.** *ornaticrus*, *hirsuta* p. 577, *tigripes* p. 580, *aethiopiae* p. 582, *exigua* p. 587, Gold Coast, *ashantii* Gold Coast and Nigeria p. 589, *melanchroa* Gold Coast p. 591, *nigeriensis* Nigeria p. 592, **spp. n.** fig., INGRAM & MACFIE Ann. Trop. Med. & Parasit. **18.**—*F. orientalis* **sp. n.** Java p. 135, KIEFFER Ann. Soc. sci. Bruxelles C.R. **43** 1923.—*F. egypti* p. 61, *nilotheres* p. 62, **spp. n.** fig., Egypt, MACFIE Bull. Ent. Res. **15.**

Fournieria **gen. n.** *norvegica* **sp. n.** Norway p. 394, KIEFFER Ann. Soc. sci. Bruxelles C.R. **43.**

Galapagomyia **gen. n.** *longipes* **sp. n.** Galapagos p. 86 fig., JOHNSON Zoologica **5.**

Glyptotendipes sigillatus **sp. n.** France p. 82, *meinerti* see *Endochironomus* p. 80, KIEFFER Ann. Soc. sci. Bruxelles Mem. **42** 1923.—*G. scirporum* **sp. n.** Germany p. 393, KIEFFER op. cit. C.R. **43.**

Hartomyia (*Ceratopogon*) *gilva* Malloch nec Coq. see *Stilobezzia mallochi.*

Holtedahlia **gen. n.** *borealis* p. 5, *crassicornis* p. 6, **spp. n.** Arctic, KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 2 1922.

Hydrobaenus glacialis Lundstr. see *Psilocerus.*

Kempia longipalpis p. 135, *curtipalpis* p. 136, *armativentris* p. 137, **spp. n.** Java, KIEFFER Ann. Soc. sci. Bruxelles C.R. **43.**

Lasiohelea key to W. African p. 381, *nigeriae* Nigeria p. 382, *brevitarsata* Gold Coast **spp. n.**, *lefanui* **var. n.** *squamipes* ? Zanzibar, *caliginosa* p. 386, *litoraurea* p. 389, *inconspicuosa* p. 391 Gold Coast, **spp. n.** fig., INGRAM & MACFIE Ann. Trop. Med. & Parasit. **18.**

Lauterbornia chlorophila **sp. n.** France, *coracina* **var. n.** *lobata* Germany p. 112, KIEFFER Ann. Soc. sci. Bruxelles Mem. **42** 1923.

Lenzia, Chironomus leucolabis Kieff. transferred to, and redescribed Germany p. 94, KIEFFER t.c.

Limnochironomus fuscicauda **sp. n.** Schleswig-Holstein p. 82, KIEFFER t.c.

Lundströmia roseiventris **var. n.** *analis* p. 102, *ocularis* **sp. n.** p. 103 Bohemia, KIEFFER t.c.—*L.*, notes on genus p. 331, THIENEMANN Zool. Anz. **58.**

Lundstroemiella **gen.n.** for *Chironomus bergrothi* Kieff. p. 3, KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 9 1923.—*L.* Kieff. nec Frey see *Lundstroemiola.*

Lundstroemiola **n. n.** for *Lundströmiella* Kieff. nec Frey p. 392, KIEFFER Ann. Soc. sci. Bruxelles C.R. **43.**

Macropelopia lobatiforceps **sp. n.** Bohemia p. 174, KIEFFER op. cit. Mem. **42** 1923.—*M. sigillata* **sp. n.** Sweden p. 395, KIEFFER op. cit. C.R. **43.**—*M. ocellata* **sp. n.** Germany p. 105 fig., MUELLER Verh. zool.-bot. Ges. Wien **73.**

Metriocnemus, key to Arctic spp. p. 8, *septentrionalis*, *longistylus* p. 9, *oeklandi* p. 10, *similis* **spp. n.**; *ursinus* **var. n.** *trinotatus* p. 11 Arctic figs., KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 2 1922.—*M. albiclava* p. 161 Bohemia, *brevicornis*, *longicornis* p. 162, *ampullaceus* p. 163 Germany, **spp. n.**, KIEFFER Ann. Soc. sci. Bruxelles Mem. **42** 1923.

Micropelopia beringensis **sp. n.** Germany p. 107, MUELLER Verh. zool.-bot. Ges. Wien **73.**

Micropsectra rufofasciata p. 103, *barbatimanus* p. 104, *quadrilobus* Bohemia, *piligera* p. 105, *nigrofasciata* p. 106, Germany **spp. n.**, KIEFFER Ann. Soc. sci. Bruxelles Mem. **42** 1923.

Microtendipes lugubris ♀ described Germany p. 392, KIEFFER op. cit. C.R. **43.**—*M. pedellus* **var. n.** *laccophilus* Germany p. 83, KIEFFER op. cit. Mem. **42** 1923.

Monotanytarsus pallidus p. 97, *capucinus* p. 98, **spp. n.** Bohemia, KIEFFER op. cit. Mem. **42** 1923.

Natvigia **gen. n.** *septentrionalis* **sp. n.** Novaya Zemlya p. 7 fig., KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 2 1922.

Neoceratopogon (= *Thysanognathus*) *melanostictus*, ♀ described p. 66 note, MACFIE Bull. Ent. Res. **15.**

Oeklandia **gen. n.** *borealis* **sp. n.** Novaya Zemlya p. 6 fig., KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 2 1922.

Orthocladius trigonolabis **sp. n.** Spitsbergen p. 170 fig., EDWARDS Ann. Mag. N. H. (9) **14.**—*O.* key to Arctic spp., *gelidus* p.13, *novae-semliae* p. 14, *glacialis* p. 15, **spp. n.** Novaya Zemlya figs., KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 2 1922.—*O. breviseta* **sp. n.** Novaya Zemlya p. 7, *paradoxus* see *Synpsilocerus* p. 3, KIEFFER op. cit. no. 9 1923.—*O. atripluma* p. 138, *trifidus* p. 139 Germany, *fluviatilis* Moravia **spp. n.**, *hygropetricus* **var. n.** *dissimilis* p. 140 Westphalia, (*Pachycladius*) *ellipsoïdalis* **sp. n.** Bohemia p. 143, KIEFFER Ann. Soc. sci. Bruxelles Mem. **42** 1923.

Palpomyia subasper eversible gland p. 144 fig., HOFFMAN Proc. Ent. Soc. Wash. **26.**—*P. unifasciata, citrinipes* **spp. n.** Bohemia p. 72, KIEFFER Ann. Soc. sci. Bruxelles Mem. **42** 1923.

Paratanytarsus bilobatus p. 95, *boiemicus* Bohemia, *bausecllus* p. 96, *unicolor* p. 95 **spp. n.**, *Tomotanytarsus* **subgen. n.** *quintuplex* **sp. n.** p. 94 Germany, KIEFFER t.c.

Paratendipes, Chironomus flavoviridis Lundstr. transferred to, p. 3, KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 9 1923.

Parrotia **gen. n.** *flaviventris* type p. 140, *nigriventris* p. 141, **spp. n.** Java, KIEFFER Ann. Soc. sci. Bruxelles C.R. **43.**

Pentapedilum zavreli Bohemia, *quadrifarium* Germany, **spp. n.** p. 93, KIEFFER op. cit. Mem. **42** 1923.

Phaenocladius key, *borealis* p. 19, *albicauda* p. 20, **spp. n.** Arctic, KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 2 1922.

Phaenopelma **gen. n.** *fuscicauda* **sp. n.** Germany p. 110, KIEFFER Ann. Soc. sci. Bruxelles Mem. **42** 1923.

Phytochironomus aequalis Westphalia *zavrelianus* Bohemia, **spp. n.** p. 79, KIEFFER t.c.

Polypedilum heptatomum, limnophilum p. 89 Germany, *astictum* p. 90, *flavipes* Bohemia **spp. n.**, *hirtimanus* **var. n.** *scutellare* p. 91; *obliteratum* **var. n.** *majus* p. 92 Germany, KIEFFER t.c.—*P. humile* Algeria p. 255, *ornatipes* Java p. 265, **spp. n.**, KIEFFER op. cit. C.R. **43.**

Probezzia javana **sp. n.** Java p. 142, KIEFFER Ann. Soc. sci. Bruxelles C.R. **43.**

Propsilocerus **gen. n.** type *lacustris* **sp. n.** Germany p. 169, KIEFFER op. cit. Mem. **42** 1923.

Protanypus notes p. 119, *morio* Zett. redescribed p. 121, *caudatus* **sp. n.** Norway p. 122 figs., EDWARDS Ann. Biol. lac. **13.**

Protanytarsus **gen. n.** *femineus* **sp. n.** Schleswig-Holstein p. 111, KIEFFER Ann. Soc. sci. Bruxelles Mem. **42** 1923.

Protenthes stictolabis **sp. n.** Bohemia p. 179, KIEFFER t.c.

Psectrocladius tridentatus **sp. n.** Arctic p. 17 fig., KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 2 1922.—*P. rhodesiae* **sp. n.** Rhodesia p. 260, KIEFFER Ann. Soc. sci. Bruxelles C.R. **43.**—*P. barbatipes* Bohemia, *brehmi* p. 144, *filiger* p. 145, *bifilis, clypeatus* p. 146 Germany **spp. n.**, KIEFFER op. cit. Mem. **42** 1923.

Psectrotanypus longicalcar **var. n.** *rhomboideus* no locality p. 104, MUELLER Verh. zool.-bot. Ges. Wien **73.**

Psilocerus, Hydrobaenus glacialis Lundstr. transferred to, p. 3, KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 9 1923.

Psilodiamesa impunctata **sp. n.** Novaya Zemlya p. 9 fig., KIEFFER t.c.

Rheotanytarsus pentacritus **sp. n.** France p. 128, KIEFFER Ann. Soc. sci. Bruxelles Mem. **42** 1923.

Stempellina bausei **varr. n.** *fasciata* Bohemia p. 113, *cornuta* Germany p. 114, KIEFFER t.c.

Stilobezzia mallochi **n. n.** for *Hartomyia* (*Ceratopogon*) *gilva* Malloch nec Coq. p. 283, HOFFMAN Ent. News **35.**

Syndiamesa vidua p. 23, *gelida* p. 24, **spp. n.** Arctic fig., KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 2 1922.—*S. miriforceps* **sp. n.** Novaya Zemlya p. 10 fig., KIEFFER op. cit. no. 9 1923.—*S. leucopeza* **sp. n.** Germany p. 99 fig., MUELLER Verh. zool.-bot. Ges. Wien **73.**

Synpsilocerus **gen. n.** for *Orthocladius paradoxus* Lundstr. p. 3, KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 9 1923.

Tanypus heteroneurus, pectinatus p. 175, *spinosicalcar* p. 176, *chirophorus* p. 177, **spp. n.** Bohemia, KIEFFER Ann. Soc. sci. Bruxelles Mem. **42** 1923.—*T. albus* Germany, *viridellus* Moscow, **spp. n.** p. 396, KIEFFER op. cit. C.R. **43.**

Tanytarsus key to larvae and pupae p. 333, THIENEMANN Zool. Anz. **58.**—*T.* **subgen. n.** *Tetratanytarsus* p. 114, *gibbosifrons, gibbosiceps* p. 115, *gibbifer* p. 117, *fulvonotatus, viridiforceps* p. 118, *minusculus, curticornis* p. 120, *limicola, magnifrons* p. 121 (with **var. n.** *brevioricornis*), *latifrons, quinarius* p. 122, *atronotatus, flavoviridis* p. 123, *clavatus* p. 124, *bifilis, viridellus* p. 125 Germany, *bilobatus* p. 116, *tetramerus* p. 119 Bohemia, (subgen. *Tanytarsus*) *diceras, signatifrons, senarius* p. 126, *myrmedon, trilobatus* p. 127 Germany **spp. n.**, KIEFFER Ann. Soc sci. Bruxelles Mem. **42** 1923.

Tetratanytarsus **subgen. n.** see *Tanytarsus.*

Thalassomyia Schin. described and compared with *Cardiocladius* Kieff. p. 204, EDWARDS Ent. Mo. Mag. **60.**

Thienemanniella **subgen. n.** see *Corynoneura.*

Thysanognathus see *Neoceratopogon.*

Tomotanytarsus **subgen. n.** see *Paratanytarsus.*

Trichocladius lestralis **sp. n.** Spitsbergen p. 172 fig., EDWARDS Ann. Mag. N. H. (9) 14.—*T.*, key p. 17, *gelidus, novae-semliae, glacialis* **spp. n.** Arctic p. 18 fig., KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 2 1922.—*T. polychaetus* **sp. n.** Novaya Zemlya p. 8 fig., KIEFFER op. cit. no. 9 1923.—*T. phragmitis* p. 153, *microtomus, mocrocerus* [sic] p. 154, *algicola* p. 155, *truncatus, fuscinervis* p. 158, *albicauda* p. 159, *lambertoni* p. 160 Germany, *nudipennis* p. 155, *bifidus* p. 156, *brevipalpis, dentatus* p. 157 Bohemia **spp. n.**, KIEFFER Ann. Soc. sci. Bruxelles Mem. **42** 1923.

Trichotanypus key to European spp. p. 383, *simplex, squamiger, astictus, atrinervis, fulvus* p. 384, *crassiforceps* p. 385, *abditus, ploenensis, aterrimus, silesiacus* p. 386, *imicola, longilobus, subaequalis, scapularis, pruinosus, niger, bathocryptus* p. 387, *dimidiatus, nigriventris, occulius, duodenarius* p. 388, *profundorum* p. 389, *abyssorum, absconditus* p. 390 **spp. n.** Europe, *pectinatus* **var. n.** *longicornis, crassinervis* **var. n.** *scutellaris* p. 385, KIEFFER Ann. Soc. sci. Bruxelles C. R. **43.**—*T. rufoscutellatus* **sp. n.** seu **var.** France p. 101 fig., MUELLER Verh. zool.-bot. Ges. Wien **73.**

Trissocladius rufus **sp. n.** p. 163, *praticola* **var. n.** *boiemicus* p. 164 Bohemia, KIEFFER Ann. Soc. sci. Bruxelles Mem. **42** 1923.

Trissopelopia **gen. n.** *flavida* **sp. n.** Bohemia p. 178, KIEFFER t.c.

Tritanytarsus atridorsum p. 99, *fasciatus* p. 100, **spp. n.** Germany, KIEFFER t.c.

Tvetenia **gen. n.** *duodenaria* **sp. n.** Novaya Zemlya p. 12 figs., KIEFFER Rept. Norw. Exp. Nov. Zeml. no. 2 1922.

Xylocrypta ocularis **sp. n.** Germany p. 397, KIEFFER Ann. Soc. sci. Bruxelles C. R. **43.**

Zavreliella **gen. n.** type *Chironomus clavaticrus* p. 87, KIEFFER op. cit. Mem. **42** 1923.

CULICIDAE.

A revision of the Culicine mosquitoes of India, BARRAUD Ind. J. Med. Res. **11** pp. 845–865, 971–976, 977–978, 979–998, 1259–1274 & 1275–1282 18 pls.; **12** pp. 15–22, 39–46, 139–143, 427–434 4 pls.

Notes on Dutch East-Indian mosquitos, BRUG Bull. Ent. Res. **14** pp. 433–442 figs.

Culicinae of Dutch East Indies, descriptions and notes, BRUG Vereen. Bevard. Geneesk. Wetenschappen Ned. Indië (1924) 53 pp.

Dutch East Indian Anophelines and Culicines, BRUG & HAGA Geneesk. Tijdschr. Ned.-Indië **63** 1923 pp. 635–640.

Some Himalayan and Peninsular varieties of Indian Anophelines, CHRISTOPHERS Ind. J. Med. Res. **12** pp. 11–13.

Common species of mosquitoes described for purposes of identification, COOLING Australia Dept. Health Serv. Pubn. (Trop. Div.) no. **1** 24 pp. figs.

A synonymic list of the more imporant species of Culicidae of the Australian Region, COOLING Australia Dept. Health Serv. Pubn. (Trop. Div.) no. **2** 61 pp.

The larval stages and biology of the commoner species of Australian mosquitoes, COOLING Australia Dept. Health Serv. Pubn. (Trop. Div.) no. **8** 40 pp. 15 figs.

The mosquitoes of Colorado, DYAR Ins. Insc. Mens. **12** pp. 39–46.

American references in the catalogue of Indian Culicidae, DYAR Ins. Insc. Mens. **12** pp. 57–60.

Notes on Sabethids from Central America and the W. Indies, DYAR Ins. Insc. Mens. **12** pp. 85–91, 101–107.

Key to subfamilies of Culicidae and to genera of Chaoborinae, DYAR & SHANNON Ins. Insc. Mens. **12** pp. 202 & 204.

A synopsis of the adult mosquitos of the Australasian Region, EDWARDS Bull. Ent. Res. **14** pp. 351–401.

Dutch East Indian Anophelines and Culicines, notes, HAGA Geneesk. Tijdschr. Ned.-Indië **64** pp. 815–834.

German Culicid fauna, MARTINI Zs. angew. Ent. **10** pp. 436–447.

The genera of Culicidae of N. America with key, MATHESON Can. Ent. **56** pp 157–161, 11 figs.

The mosquitos of N. Africa, Egypt and Syria, SÉGUY Ency. ent. A Dipt. **1** 257 pp. fig.

Pupae of some Palestinian Culicines, THEODOR Bull. Ent. Res. **14** pp.341–345.

Aëdes pecuniosus biology p. 24 fig., COOLING Australia Dept. Health Serv. Pubn. (Trop. Div.) no. **8**.—*A. punctor* synonymy p. 24, *scapularis* notes on American group p. 117, *melanimon* **sp. n.** California p. 126, *philippii* **n. n.** for *Culex vittatus* Philippi p. 129, *colonarius* **sp. n.** Chile p. 130, *alleni* p. 131, *thelcter* p. 132 larva, *aloponotum* notes p. 176, *cinereus* American forms (with **n. race** *hemiteleus*) p. 179, *ventrovittis* notes p. 181, DYAR Ins. Insc. Mens. **12**.—*A.* key p. 368, *carmenti* **sp. n.** Solomon Is., N. Queensland p. 388, EDWARDS Bull. Ent. Res. **14**.—*A. chelli* ♂ described Ovamboland p. 159, *barnardi* p. 161, *capensis* p. 162, **spp. n.** Cape Province, EDWARDS Ann. S. Afr. Mus. **19**.—*A. abserratus* F. & Y. distinct from *punctor* Kirby p. 22, *abserratus* F. & Y. (= *dysanor* Dyar) p. 23, MATHESON Ins. Insc. Mens. **12**.—*A. alleni* **sp. n.** Texas p. 84 ,TURNER Ins. Insc. Mens. **12**.

Aëdes (*Banksinella*) *brugi* **sp. n.** Papua p. 371, EDWARDS Bull. Ent. Res. **14**.

Aëdes (*Finlaya*) key to Indian adults p. 847, *greeni* **var. n.** *ranarana* p. 850, *dissimilis* **var. n.** *karwari* p. 865, *sintoni* p. 967, *gilli* p. 1000, *albocincta* p. 1002 **11** ; *versicolor* p. 73 **12**, **spp. n.** India fig., BARRAUD Ind. J. Med. Res.—*A.* (*F.*) *palmarum* **sp. n.** N. Queensland p. 382, EDWARDS Bull. Ent. Res. **14**.

Aëdes (*Ochlerotatus*) *eucephaleus* p. 169, (*O.*) *hortator* p. 170 larva, BONNE Ins. Insc. Mens. **12**.—*A.* (*O.*) *cunabulanus* **sp. n.** Tasmania p. 378, EDWARDS Bull. Ent. Res. **14**.

Aëdes (*Skusea*) *umbrosus* **sp. n.** Dutch E. Indies p. 437 fig., BRUG Bull. Ent. Res. **14**.—*A. fimbripes* New Britain, *tonsus* Amboina, **spp. n.** p. 390, EDWARDS Bull. Ent. Res. **14**.

Aëdes (*Stegomyia*) *calceatus* p. 197, (*S.*) *soleatus* p. 198, **spp. n.** Tanganyika (fig. after p. 187), EDWARDS Trans. R. Soc. Trop. Med. & Hyg. **18**.—*A.* (*S.*) *mascarensis* **sp. n.** Mauritius p. 409 (fig.), key to adults and larvae of Mauritian spp. p. 412, MACGREGOR Bull. Ent. Res. **14**.

Anopheles, key to the fourth stage larvae of Palestine pp. 45–51 figs., BUXTON Bull. Soc. R. ent. Egypte **1923** 1924.—*A. lindesayi* **var. n.** *nilgiricus* Himalayas p. 13, *culicifacies* **var. n.** *adenensis* Aden, *jeyporiensis* **var. n.** *moghulensis* p. 296, *maculatus* **var. n.** *dravidicus* p. 297, India, CHRISTOPHERS Ind. J. Med. Res. **12**.—*A. vestitipennis* ♂ p. 171, DYAR Ins. Insc. Mens. **12**.—*A.* (*Myzorhynchus*) *barbirostris* key to varieties p. 817, HAGA Geneesk. Tijdschr. Ned.-Indië **64**.—*A. funestus* notes on Indian group pp. 23–29, *varuna* **sp. n.** India p. 24 figs., IYENGAR Ind. J. Med. Res. **12**.—

A. (*Cellia*) *pulcherrimus* **var. n.** *atropotenae* Azerbaijan p. 40, LINDTROP Russ. J. Trop. Med. **1924** no. 3.—*A.*, distribution in Upper Austria p. 42, PRIESNER Jahresb. Oberöst. Musealver. **79** 1922.—*A.*, male genitalia of American pp. 456–465, *quadrimaculatus*, *punctipennis* larval pilotaxy pp. 710–724 fig., ROOT Amer. J. Hyg. **4.**—*A. maculipennis* mating habits pp. 69–70, RUDOLFS Ent. News **35.**—*A.*, maxillary teeth pp. 142–143, SHANNON Proc. Ent. Soc. Wash. **26.**—*A. funestus*, *minimus* and *aconitus* identity and biology pp. 145–152 fig., STRICKLAND Ind. J. Med. Res. **12.**

Banksinella see *Aëdes.*

Cellia see *Anopheles.*

Chaoborus, key p. 209, (*C.*) *eluthera* Idaho, Washington p. 211, (*Sayomyia*) *astictopus* California p. 214, (*S.*) *festivus* Panama p. 215, **spp. n.**, DYAR & SHANNON Ins. Insc. Mens. **12.**

Choeroporpa see *Culex.*

Corethra key p. 206, *cinctipes* **var. n.** *obscura* Washington p. 208, DYAR & SHANNON Ins. Insc. Mens. **12.**—*C.*, circulatory system of larvae p. 160, LEBRUN Ann. Soc. sci. Bruxelles C.R. **42.**

Culex keys to Indian spp. pp. 981, 1260 and 1276, *eadithae* p. 1004, *hutchinsoni* p. 1261, *fuscitarsis* p. 1272, *tenuipalpis* p. 1278. *iphis* p. 1279, *pluvialis* p. 1281, **11**; (*Culiciomyia*) *shebbearei* p. 19, (*Lophoceratomyia*) *flavicornis* p. 45, *plantaginis* p. 45 India **spp. n.** figs.; *sitiens* p. 427, *gelidus* p. 428, *tipuliformis*, *fatigans* p. 430, *perexiguus* p. 431, *fuscocephalus*, *brevipalpis* p. 432, *tenuipalpis* p. 433, larvae described, **12**, BARRAUD Ind. J. Med. Res.—*C. flavipes* note p. 85, BONNE Ins. Insc. Mens. **12.**—*C. tarsalis* male genitalia, *stigmatosoma* a distinct species p. 95, *aglischrus* p. 121, (*Choeroporpa*) *sursumptor*, *ligator* p. 123 (a synonym of *sursumptor* p. 183) Colombia, *badgeri* California p. 125, *exilis* Siberia p. 127, (*C.*) *crybda*, (*Mochlostyrax*) *colombiensis* Colombia p. 184, **spp. n.**, DYAR Ins. Insc. Mens. **12.**—*C.* (*Choeroporpa*) *dornarum* p. 46, (*C.*) *fatuator* p. 47, (*C.*) *cuclyx* p. 48, (*Melanoconion*) *ruffinis* p. 143, **spp. n.** Panama, DYAR & SHANNON Ins. Insc. Mens. **12.**—*C.*, key to Australasian p. 391, EDWARDS Bull. Ent. Res. **14.**—*C. péringueyi* **sp. n.** Cape Town p. 162, EDWARDS Ann. S. Afr. Mus. **19.**—*C.* (*Choeroporpa*) *innominatus* p. 363, (*C.*) *clarki* p. 365, (*C.*) *tovari* p. 367, (*C.*) *gordoni* p. 369, (*C.*) *manaosensis* p. 370, (*C.*) *tomasi* p. 372, *innovator* p. 373, **spp. n.** S. America fig., EVANS Ann. Trop. Med. & Parasit. **18.**—*C. fatigans* egg-follicle p. 152 figs., NATH Q.J. Micr. Sci. **69.**—*C. ittatus* Philippi see *Aëdes philippii.*—*C. melanurus* see *Theobaldia.*

Culicella see *Theobaldia.*

Culiciomyia see *Culex.*

Culiseta maccrackenae larva p. 144, DYAR Ins. Insc. Mens. **12.**

Dendromyia notes p. 110, DYAR t.c.

Finlaya see *Aëdes.*

Lophoceratomyia see *Culex.*

Lutzia, key to Indian spp. p. 972, and larvae p. 977, BARRAUD Ind. J. Med. Res. **11.**

Megarhinus edwardsi **sp. n.** W. Himalayas p. 999, BARRAUD t.c.

Myzorhynchus see *Anopheles.*

Phoniomyia notes p. 107, key p. 109, DYAR Ins. Insc. Menstr. **12.**

Rachionotomyia key p. 359, *magnesiana* Queensland p. 361, *solomonis* Solomon Is. p. 363, **spp. n.**, EDWARDS Bull. Ent. Res. **14.**

Sabethes key to American, *remipusculus* **n. n.** for *purpureus*, *melanonymphe* **n. n.** for *Sabethinus albiprivatus*, p. 100, DYAR Ins. Insc. Menstr. **12.**

Sabethinus albiprivatus see *Sabethes melanonymphe.*

Stegomyia see *Aëdes.*

Taeniorhynchus (*Coquillettidia*) *xanthogaster* **n. n.** for *T. acer* Theo. nec Wlk., *tenuipalpis* **sp. n.** New Zealand p. 366, EDWARDS Bull. Ent. Res. **14.**

Theobaldia, key to Indian pp. 139–143, BARRAUD Ind. J. Med. Res. **12.**—*T. annulata* **var. n.** *ferruginata* Germany p. 438, MARTINI Zs. angew. Ent. **10.**—*T.*, *Culex melanurus* referred to, p. 159, MATHESON Can. Ent. **56.**—*T. morsitans*, undescribed larval instar p. 83 fig., WRIGHT Ann. Trop. Med. & Parasit. **18.**

Uranotaenia papua **sp. n.** New Guinea p. 441, BRUG Bull. Ent. Res. **14.**—*U.*, key to American p. 187, *syntheta* **sp. n.** Texas p. 189, DYAR & SHANNON Ins. Insc. Mens. **12.**

Wyeomyia mystes **sp. n.** Brazil p. 92, note on genus p. 113, *camptocomma* **sp. n.** Colombia p. 120, DYAR Ins. Insc. Mens. **12.**

THAUMALEIDAE.

Thaumalea revision of American spp., *pluvialis* p. 433, *johannis*, *elnora* p. 434, **spp. n.** America, DYAR & SHANNON J. Wash. Acad. Sci. **14.**

PSYCHODIDAE.

Phlebotomus table of males, distribution and seasonal prevalence of Indian and Cingalese pp. 809, 1035, *minutus* **var. n.** *montanus* India p. 812, notes on *himalayensis* p. 817, *malabaricus* p. 1007, *perturbans* p. 1015, *zeylanicus* p. 1029, **11**; *simillimus* **var. n.** *hospitii* Kashmir p. 261, **12** figs., SINTON Ind. J. Med. Res.

Psychoda key, (*Pericoma*) *scotiae* p. 216, (*P.*) *megantica* p. 217, (*P.*) *orillia*, (*P.*) *criddlei* p. 218, (*P.*) *alberta*, *prudens* p. 219, *varitarsis* p. 220, **spp. n.** Canada, CURRAN Can. Ent. **56.**—*P. alternata* life-history p. 338, TURNER Science **60.**

Telmatoscopus meridionalis morphology, ethology pp. 191–235 fig., ZAVATTARI Redia **15.**

PTYCHOPTERIDAE.

Bittacomorphella nipponensis **sp. n.** Japan p. 51, ALEXANDER Ins. Insc. Mens. **12.**

Ptychoptera formosensis **sp. n.** Japan p. 49, ALEXANDER t.c.

TANYDERIDAE.

Radinoderus, key to Australasian p. 141, ALEXANDER Ins. Insc. Mens, **12.**

Tanyderus (*Radinoderus*) *terrae-reginae* Queensland p. 141, (*R.*) *solomonis* Solomon Is. p. 143, **spp. n.**, ALEXANDER t.c.

RHYPHIDAE (ANISOPODIDAE).

Paracladura harrisi p. 10, *curtisi* p. 11, *decussata* p. 12, *complicata* p. 13 N. Zealand, *nipponensis* Japan p. 82, **spp. n.**, ALEXANDER Ins. Insc. Mens. **12.**

Rhyphus fulvithorax **sp. n.** Sumatra p. 9, DE MEIJERE Tijd. Ent. **67** Suppl.

TRICHOCERIDAE.

Synonymy and corrections in Trichoceridae of Spitsbergen, EDWARDS Ann. Mag. N. H. (9) **14** p. 162.

Trichocera bituberculata **sp. n.** Alaska p. 81, ALEXANDER Ins. Insc. Mens. **12.** —*T. regelationis* early stages p. 36 fig., RHYNEHART Proc. Rep. Belfast N. H. Soc. **1922–1923.**

DIXIDAE.

Australian Dixidae, TONNOIR Pap. & Proc. R. Soc. Tasmania **1923** 1924 pp. 58–71, 7 figs.

Dixa key to subgenera p. 210, *thones* p. 193, *hegemonica* p. 194, *somnolenta*, *xavia* p. 195, *nocheles* p. 196, *rhathyme*, *mystica* p. 197, *inextricata* p. 198, *blax*, *arge* p. 199, (*Dixella* **subgen. n.**) *lirio* p. 200, **spp. n.** U.S.A., *Dixapuella* **subgen. n.** for *marginata* Loew p. 201, DYAR & SHANNON Ins. Insc. Mens. **12.**—*D. flavicollis* Victoria p. 60, *geniculata* p. 61, *tasmaniensis* p. 63, and larva p. 69 Tasmania, *nicholsoni* p. 64, larva, p. 69, *humeralis* p. 65 N.S.W., *unipunctata* p. 66, larva p. 70 Tasmania, **spp. n.** figs., TONNOIR Pap. & Proc. R. Soc. Tasmania **1923.**—*D. zeylanica* **sp. n.** Ceylon p. 381, SENIOR-WHITE Spolia Zeylanica **12.**—*D. aliciae* **sp. n.** California p. 45, JOHANNSEN Psyche **31.**

Dixapuella **subgen. n.** see *Dixa.*

Dixella **subgen. n.** see *Dixa.*

TIPULIDAE (including LIMNOBIIDAE).

The Crane-flies of New York, ALEXANDER Bull. Brooklyn Ent. Soc. **19** pp. 57–64.

Studies of New Zealand Tipulidae, ALEXANDER Trans. N.Z. Inst. **55** pp. 641–680 20 figs.

Arctic Crane-flies, ALEXANDER Norsk Ent. Tidsskr. **1** pp. 296–297.

Sex relations and oviposition of Limnobiidae, BARNES Ent. Mo. Mag. **60** p. 71.

Preliminary list of Tipulidae of Carnarvonshire, BARNES Ent. Mo. Mag. **60** p. 225.

Notes on the types of Tipulidae described by Mr. E. Brunetti, EDWARDS Rec. Ind. Mus. **26** pp. 295–307.

Additions to catalogue of Tipulidae of Belgium, GOETGHEBUER Bull. Soc. ent. Belg. **6** p. 83.

Intestines of Limnobiid larvae, KÖNNEMANN Zool. Jahrb. Abt. Anat. **46** p. 343 figs.

Acantholimnophila **gen. n.** type *Limnophila maorica* Alex. p. 369, ALEXANDER Ann. Mag. N. H. (9) **13.**

Acutipula **subgen n.** see *Tipula.*

Amphineurus meridionalis p. 569, *stewartiae* p. 570, *perarmatus* p. 571, **spp. n.** New Zealand, ALEXANDER t.c. —*A. bicorniger* p. 297, *operculatus* p. 298 **spp. n.**, *tumidus* **subsp. n.** *breviclavus* p. 297 N.Z., ALEXANDER op. cit. **14.**—*A. subdecorus* **sp. n.** N.Z. p. 160, EDWARDS op. cit. **13.**

Antocha, key to Japanese p. 562 (*Proantocha*) *serricauda* p. 563, (*A.*) *bifida* p. 546, *dilatata* p. 566, *brevinervis, brevistyla* p. 567, Japan **spp. n.**, ALEXANDER Phil. J. Sci. **24.**—*A. dentifera* **sp. n.** Japan p. 63, ALEXANDER Ann. Ent. Soc. Amer. **17.**

Aurotipula **subgen. n.** see *Macromastix.*

Austrolimnobia victoriae **sp. n.** Victoria p. 503, ALEXANDER Ann. Mag. N. H. (9) **13.**

Ceoneura **subgen. n.** see *Tanypremna.*

Cerozodia hiemalis see *Gynoplistia.*

Chionea araneoides figured p. 126, OBENBERGER Casopis **20** 1923.

Chlorotipula **subgen. n.** see *Macromastix.*

Cladura decemnotata **sp. n.** Japan p. 436, ALEXANDER Ann. Ent. Soc. Amer. **17.**

Cnemoncosis uniplagiata **sp. n.** Japan p. 442, ALEXANDER t.c.

Ctenacroscelis lepidus p. 45, *walkerianus* p. 47, **spp. n.** Fiji, ALEXANDER Ann. Mag. N. H. (9) **13.**

Ctenophora pilosa **sp. n.** Paris p. 83 fig., PIERRE Encyc. ent. Dipt. **1.**

Dicranomyia subsaltens p. 34, *fijiana* Fiji, *rapae* Austral Is. p. 36, *bryani* Hawaiian Is. p. 35, *circularis* p. 359, *laterospina* p. 360, *melina, tapleyi* p. 362, *gubernatoria* p. 363, (*Zelandoglochina* **subgen. n.**) type *huttoni*, Edw. p. 499, *myersi* p. 500 **spp. n.**, *paradisea* **subsp. n.** *circumcincta* p. 561, *pictithorax* **subsp. n.** *argentifera* p. 565, *primitiva* p. 562, *subfasciata* p. 563, *semicuneata* p. 564, **spp. n.** N. Zealand, ALEXANDER Ann. Mag. N. H. 4 (9) **13.**—*D. acanthophallus* p. 289, *otagensis* p. 290, *arthuriana* p. 291 **spp. n.** N. Z., ALEXANDER op. cit. **14.**—*D.* (*Euglochina*) *okinawensis, kirishimana* p. 432, *pammelas* p. 433, **spp. n.** Japan, ALEXANDER Ann. Ent. Soc. Amer. **17.**—*D. flavofascialis* p. 61, *patruelis* p. 62, *globulicornis* p. 63, *jujuyensis* p. 64, **spp. n.** Argentina, ALEXANDER Ent. News **35.**—*D. subtristis* p. 542, *sachalina* p. 543, *sparsa* p. 544, *spinicauda* p. 545, *megacauda* p. 546, *globulithorax* p. 547, **spp. n.** Japan fig., ALEXANDER Phil. J. Sci. 24.—*D. nebulosa* see *Limonia neonebulosa.*—*D. lugubris* **sp. n.** Sumatra p. 7 fig., DE MEIJERE Tijd. Ent. **67** Suppl.

Dicranoptycha venosa **sp. n.** Japan p. 561, ALEXANDER Phil. J. Sci. **24.**

Dicranota yezoensis **sp. n.** Japan p. 571, ALEXANDER t.c.

Discobola key to Holarctic species p. 538, *margarita* p. 539, *moiwana* p. 540, **spp. n.** Japan, ALEXANDER t.c.

Doaneomyia fijiensis **sp. n.** Fiji p. 33, ALEXANDER Ann. Mag. N. H. (9) **13.**

Dolichopeza longidigitalis **sp. n.** N. S. Wales p. 182, ALEXANDER t.c.

Elephantomyia hokkaidensis **sp. n.** Japan p. 580, ALEXANDER Phil. J. Sci. **24.**—*E. flaveola* **sp. n.** Ivory Coast p. 79 fig., PIERRE Encyc. ent. Dipt. **1.**

Elliptera zipanguensis **sp. n.** Japan p. 559, ALEXANDER Phil. J. Sci. **24.**

Ephelia masculatifrons **sp. n.** France p. 89 fig., PIERRE Encyc. ent. Dipt. **1.**

Epiphragma hebridensis **sp. n.** New Hebrides p. 44, ALEXANDER Ann. Mag. N. H. (9) **13.**

Eriocera jozana p. 579, *sachalinensis* p. 579, **spp. n.** Japan, ALEXANDER Phil. J. Sci. **24.**

Erioptera aliena p. 66, *subsessilis* p. 67, **spp. n.** Japan, ALEXANDER Ann. Ent. Soc. Amer. **17.**—*E.* (*E.*) *xanthoptera*, *flavohumeralis* p. 582, *horii* p. 583, *orbitalis*, (*Acyphona*) *sachalina* p. 584, *yezoana* p. 585, Japan **spp. n.**, ALEXANDER Phil. J. Sci. **24.**—*E.* (*E.*) *aldrichi* p. 4, *alaskensis* p. 5 Alaska, *dyari* California p. 6, *dilatata* Montana p. 7 (*Gonempeda* **subgen. n.**) *burra* California p. 8 **spp. n.**, ALEXANDER Proc. U. S. Nat. Mus. **64** art. 10.

Geranomyia **subgen. n.** *Pseudaporosa* p.177, *venustithorax* p. 178, (*Geranomyia*) *penthoptera* p. 179, *manca* p. 180, **spp. n.** Queensland, ALEXANDER Ann. Mag. N. H. (9) **13.**—*G. sakaguchii* **sp. n.** Japan p. 60, ALEXANDER Ann. Ent. Soc. Amer. **17.**—*G. genitaloides* **sp. n.** Ceylon p. 383, SENIOR-WHITE Spolia Zeylanica **12.**—*G. bezzii* marine larva and nymph pp. 113–121 fig., SEURAT Bull. Soc. Hist. nat. Afr. N. **15.**

Gnophomyia harrisiana **sp. n.** New Zealand p. 574, ALEXANDER Ann. Mag. N. H. (9) **13.**—*G. nycteris* p. 68, *confluenta* p. 69, **spp. n.** Japan, ALEXANDER Ann. Ent. Soc. Amer. **17.**—*G. tristis* **sp. n.** Japan p. 588, ALEXANDER Phil. J. Sci. **24.**

Gonempeda **subgen. n.** see *Erioptera.*

Gonomyia digitifera Fiji p. 43, *banksiana* p. 572, *circumcincta* p. 573 New Zealand **spp. n.**, ALEXANDER Ann. Mag. N. H. (9) **13.**—*G. bispina*, *olivieri* **spp. n.** N. Z. p. 299, ALEXANDER Ann. Mag. N. H. (9) **14.**—*G.* (*Ptilostenas*) *subpruinosa* p. 588, (*P.*) *sachalinensis*, (*Lipophleps*) *flavocostalis* p. 590, **spp. n.** Japan, ALEXANDER Phil. J. Sci. **24.**—*G. poliacephala* **sp. n.** California p. 8, ALEXANDER Proc. U. S. Nat. Mus. **64** art. 10.—*G. conoviensis* (= *bispinosa* Barnes nec Alex.) p. 140, BARNES Ent. Mo. Mag. **60.**—*G. pseudojucunda* **sp. n.** p. 82 fig., PIERRE Ency. ent. Dipt. **1.**—*G. leucophaea* Skuse see *Horistomyia.*

Gynoplistia myersae p. 372, *subclavipes* p. 373, **spp. n.** New Zealand, *hiemalis* from *Cerozodia* p. 372, *patruelis* p. 513, *fergusoniana* p. 516 N. S. Wales, *hamiltoni* p. 518, *vittinervis* p. 519, N. Zealand **spp. n.**, *bella* **subsp. n.** *atripes* p. 514, *bimaculata* **subsp. n.** *nigrotibialis* p. 515 N. S. Wales, *chalybeia* **subsp. n.** *evanescens* Tasmania p. 517, *ambulator* p. 575, *luteicincta* p. 576, *subformosa* p. 577, **spp. n.** New Zealand, ALEXANDER Ann. Mag. N. H. (9) **13.**—*G. aculeata* p. 302, *dilatata* p. 303, **spp. n.** N. Z., ALEXANDER op. cit. **14.**—*G. angustipennis* p. 161, *resecta* p. 162 **spp. n.** N. Z., EDWARDS op. cit. **13.**

Habromastix robinsoni p. 375, *platyxantha* p. 376, **spp. n.** N. S. Wales, ALEXANDER Ann. Mag. N. H. (9) **13.**

Helius tenuirostris **sp. n.** Japan p. 560, ALEXANDER Phil. J. Sci. **24.**—*H. subfasciatus* **sp. n.** Japan p. 62, ALEXANDER Ann. Ent. Soc. Amer. **17.**

Heterolimnophila **gen. n.** type *Limnophila truncata* Alex. p. 368, ALEXANDER Ann. Mag. N. H. (9) **13.**

Horistomyia **gen. n.** type *Gonomyia leucophaea* Skuse p. 504, ALEXANDER t.c.

Ischnothrix confluenta **sp. n.** New Zealand p. 301, ALEXANDER op. cit. **14.**

Ischnotoma episema p. 184, *scutellumnigrum* p. 185, *immaculipennis* p. 186, *goldfinchi* p. 520, **spp. n.** N.S.W., ALEXANDER t.c.

Libnotes solomonis p. 39, *manni* p. 41 Solomon Is., *greenwoodi* Fiji p. 40, *restricta* N. S. Wales p. 366, **spp. n.**, ALEXANDER Ann. Mag. N. H. (9) **13.**—*L. puella* **sp. n.** Japan p. 434, ALEXANDER Ann. Ent. Soc. Amer. **17.**—*L. veitchiana* **sp. n.** Fiji p. 571, EDWARDS Ann. Mag. N. H. (9) **14.**

Limnobia albipes **sp. n.** Ceylon p. 385, SENIOR-WHITE Spolia Zeylanica **12.**

Limnophila notes p. 366, *luteicauda* N. Zealand p. 507, *pauciseta* N. S. Wales p. 508, **spp. n.**, ALEXANDER Ann. Mag. N. H. (9) **13.**—*L. exclusa* Alex. see *Notholimnophila.*—*L. truncata* Alex. see *Heterolimnophila.*—*L. maorica* Alex. see *Acantholimnophila.*—*L.* (*Neolimnophila*) *ultima* **subsp. n.** *alaskana* p. 10, *euxesta* p. 11, *rubida* p. 12, *occidens* p. 13 U.S.A. **spp. n.**, ALEXANDER Proc. U. S. Nat. Mus. **64** art. 10.—*L. unicoides* p. 574, *subpoetica* p. 575, (*Phylidorea*) *subadusta* p. 576, **spp. n.** Japan, ALEXANDER Phil. J. Sci. **24.**—*L.* (*Prionolabis*) *neomunda*, (*Ephelia*) *dietziana* p. 437, *kirishimensis* p. 438,

inaequalis p. 439, *kuwayamai* p. 440, **spp. n.** Japan, ALEXANDER Ann. Ent. Soc. Amer. **17.**—*L.* (*Troglophila* **subgen. n.**) *cavernicola* **sp. n.** Assam p. 100, BRUNETTI Rec. Ind. Mus. **26.**

Limonia veitchi Fiji p. 37, *novaebrittanicae* New Britain p. 38, *semitristis* Queensland p. 180, *gemina* N. S. Wales p. 364, **spp. n.**, ALEXANDER Ann. Mag. N. H. (9) **13.**—*L. vilhelmi* **sp. n.** C. Africa p. 2, ALEXANDER Ark. Zool. **16** no. 18.—*L. pallidipleura* p. 150, *pullata* p. 151, *mendax* p. 152, *euphileta*, *crinita* p. 154, *fusciceps* p. 155, *inelegans* p. 156, *dicranophragmoides* p. 157, **spp. n.** Japan, ALEXANDER Ins. Insc. Mens. **12.**—*L. annulus* **subsp. n.** *truncata* p. 548, *neoindigena* p. 549, *karafutonis* p. 550, *episema* p. 551, *plutonis* p. 552, *monacantha* p. 553, *basispina* p. 554, **spp. n.**, *neonebulosa* **n. n.** for *Dicranomyia nebulosa* p. 555, *angustistria* p. 556, *amabilis* p. 557, **spp. n.** fig. Japan, ALEXANDER Phil. J. Sci. **24.**—*L. divaricata*, *imbellis* p. 61, **spp. n.** Japan, ALEXANDER Ann. Ent. Soc. Amer. **17.**

Macromastix macquartiana Tasmania p. 187, *albicollis* p. 188, *dorrigensis* p. 189, *aurantiociceps* p. 190 (with **subsp. n.** *subnitida* p. 192), *fergusoni* p. 192, *luteicosta* p. 193, N. S. Wales, **spp. n.** *hackeri* Alex. further described, *tenuirostris* p. 377, *nigrosubcostata* p. 378 N. S. Wales, *sessilis* p. 379, *simillima* p. 521, *monstrata* p. 522, **spp. n.** N. Zealand, ALEXANDER Ann. Mag. N. H. (9) **13.**—*M.* **subgenn. n.** *Aurotipula*, *Chlorotipula* p. 305, *Maoritipula* p. 306, N. Zealand, ALEXANDER Ann. Mag. N. H. (9) **14.**—*M. occlusa* **sp. n.** N. Z. p. 162, EDWARDS Ann. Mag. N. H. (9) **13.**

Maoritipula **subgen. n.** see *Macromastix.*

Mediotipula **gen. n.** (near *Habromastix*) *fulvogrisea* **sp. n.** Algeria p. 11 figs., PIERRE Encyc. ent. Dipt. **1.**

Molophilus poecilonota N. S. Wales p. 501, *longiclavus*, *pullatus* p. 566, *hexacanthus*, *sylvicolus* p. 567, *jenseni* p. 568, **spp. n.** New Zealand, ALEXANDER Ann. Mag. N. H. (9) **13.**—*M. recisus* p. 292, *stewartensis*, *submorosus* p. 293, *campbellianus* p. 294, *verecundus* p. 295 **spp. n.** N. Z., ALEXANDER op. cit. (9) **14.**—*M. cramptoni* p. 61, *quadrispinosus* p. 62, **spp. n.** New York, ALEXANDER Bull. Brooklyn Ent. Soc. **19.**—*M. albohalterata* **sp. n.** Japan p. 435, ALEXANDER Ann. Ent. Soc. Amer. **17.**—*M. albibasis* **sp. n.** Japan p. 581, ALEXANDER Phil. J. Sci. **24.**—*M. pilosulus* **sp. n.** N. Zealand p. 160, EDWARDS Ann. Mag. N. H. (9) **13.**

Nephrotoma takeuchii p. 74, *hokkaidensis* p. 446, *saghliensis* p. 447, **spp. n.** Japan, ALEXANDER Ann. Ent. Soc. Amer. **17.**—*N. esakii* **sp. n.** p. 596, *dorsalis* **subsp. n.** *sachalina*, *hirsuticauda* **sp. n.** p. 597, *aculeata* **subsp. n.** *atricauda* p. 599, *parvirostra* **sp. n.** p. 600 Japan, ALEXANDER Phil. J. Sci. **24.**—*N. solomonis*, *opima* p. 49, **spp. n.** Solomon Is., ALEXANDER Ann. Mag. N. H. (9) **13.**

Nipponomyia **gen. n.** type *Tricyphona kuwanai* Alex. p. 158, ALEXANDER Ins. Insc. Mens. **12.**

Notholimnophila **gen. n.** type *Limnophila exclusa* Alex. p. 369, ALEXANDER Ann. Mag. N. H. (9) **13.**

Orimarga formosicola, *taiwanensis* **spp. n.** Japan p. 64, ALEXANDER Ann. Ent. Soc. Amer. **17.**—*O. asignata* **sp. n.** Ceylon p. 386, SENIOR-WHITE Spolia Zeylanica **12.**

Ormosia arisanensis, *aculeata* **spp. n.** Japan p. 65, ALEXANDER Ann. Ent. Soc. Amer. **17.**—*O. subdeviata* **sp. n.** Japan p. 586, ALEXANDER Phil. J. Sci. **24.**—*O. decussata* p. 1, *curvata* p. 2, *proxima* p. 3 Alaska, *fuscopyga* California p. 3, **spp. n.**, ALEXANDER Proc. U. S. Nat. Mus. **64** art. 10.—*O. holtedahli* **sp. n.** figs., Novaya Zemlya p. 5, ALEXANDER Rept. Norw. Exp. Nov. Zeml. no. 5 1922.—*O. danica* **sp. n.** Denmark p. 111 fig., NIELSEN Videns. Medd. Copenhagen **76** 1923.

Pachyrhina schummeli female p. 124, DODONOV Ent. Mitt. **13.**—*P. nigrotergata* **sp. n.** Sumatra p. 6, DE MEIJERE Tijd. Ent. **67** Suppl.—*P. bichroma* **sp. n.** Algeria p. 12 figs., PIERRE Encyc. ent. Dipt. **1.**

Paralimnophila flammeola p. 509, *puella* p. 510, *fraudulenta* p. 512, **spp. n.** Australia, ALEXANDER Ann. Mag. N. H. (9) **13.**

Paratropesa esakii **sp. n.** Japan p. 591, ALEXANDER Phil. J. Sci. **24.**

Pilaria dorsalis **sp. n.** Japan p. 577, ALEXANDER Phil. J. Sci. **24.**—*P. microcera* **sp. n.** Oregon p. 13, ALEXANDER Proc. U. S. Nat. Mus. **64** art. 10.

Plusiomyia nasalis **sp. n.** N. S. Wales p. 183, ALEXANDER Ann. Mag. N. H. (9) **13.**

Polyangaeus gloriosus **sp. n.** Japan p. 569, ALEXANDER Phil. J. Sci. **24.**

Polymoria pristina p. 505, *electa* p. 506, **spp. n.** Australia, ALEXANDER Ann. Mag. N. H. (9) **13.**—*P. argus* **subsp. n.** *stewartiae* N. Z. p. 300, ALEXANDER op. cit. **14.**

Pselliophora longicornis **sp. n.** Sumatra p. 5, DE MEIJERE Tijd. Ent. **67** Suppl.

Pseudaporosa **subgen. n.** see *Geranomyia.*

Pseudolimnophila marcida **sp. n.** Japan p. 70, ALEXANDER Ann. Ent. Soc. Amer. **17.**—*P.*, key to Ethiopian p. 4, *gyldenstolpei* p. 7, *orthia* p. 9, *birungana* p. 10, **spp. n.** C. Africa, ALEXANDER Ark. Zool. **16** no. 18.

Psiloconopa novaezemblae **sp. n.** Novaya Zemlya p. 5 fig., ALEXANDER Rept. Norw. Exp. Nov. Zeml. no. 5 1922.—*P. marina* **sp. n.** France p. 88 fig., PIERRE Encyc. ent. Dipt. **1.**

Rhabdomastix japonica p. 69, (*Sacandaga*) *atrata* p. 436, **spp. n.** Japan, ALEXANDER Ann. Ent. Soc. Amer. **17.**—*R.* (*Sacandaga*) *borealis* **sp. n.** Alaska p.9, ALEXANDER Proc. U. S. Nat. Mus. **64** art. 10.

Rhaphidolabina dicranotoides **sp. n.** Japan p. 72, ALEXANDER Ann. Ent. Soc. Amer. **17.**

Rhaphidolabis subconsors **sp. n.** Japan p. 571, ALEXANDER Phil. J. Sci. **24.**—*R.* (*Plectromyia*) *confusa*, (*Rhaphidolabis*) *forceps* **spp. n.** New England p. 63, ALEXANDER Bull. Brooklyn Ent. Soc. **19.**—*R. stigma* **sp. n.** U.S.A. p. 14, ALEXANDER Proc. U. S. Nat. Mus. **64** art. 10.

Skuseomyia **gen. n.** p. 369, *eximia* **sp. n.** N. S. Wales p. 370, ALEXANDER Ann. Mag. N. H. (9) **13.**

Styringomyia terraereginae **sp. n.** Queensland p. 182, ALEXANDER t.c.—*S.*, notes on genus p. 265, *ingrami* p. 267, *obscuricincta* p. 268, Gold Coast, *biroi* p. 270, *kerteszi*, *papuana* p. 271, *ensifera* p. 273 New Guinea, *bipunctata* p. 272 Queensland, *armata* Philippine Is. p. 274, **spp. n.** *annulipes* **var. n.** *occidentalis* Gold Coast p. 269 figs., EDWARDS Ann. Mag. N. H. (9) **13.**—*S. fumosa* **sp. n.** Fiji p. 572, EDWARDS op. cit. **14.**—*S. marmorata* **sp. n.** Ceylon p. 386, SENIOR-WHITE Spolia Zeylanica **12.**

Tanypremna (**subgen. n.** *Ceoneura*), *idioneura* **sp. n.** Br. Guiana p. 289, (**subgen. n.** *Tanypremnodes* p. 290) *leucoplaca* **sp. n.** Brazil p. 291, ALEXANDER Ent. News **35.**

Tanypremnodes **subgen. n.** see *Tanypremna.*

Tanyptera angustistylus **sp. n.** Japan p. 441, ALEXANDER Ann. Ent. Soc. Amer. **17.**

Tasiocera bituberculata **sp. n.** N. Zealand p. 296, ALEXANDER Ann. Mag. N. H. (9) **14.**

Teucholabis yezoensis **sp. n.** Japan p. 593, ALEXANDER Phil. J. Sci. **24.**

Tipula manca p. 457, *plagiotoma* p. 458, *futilis* p. 459, *superciliosa* p. 460, *hylaea* p. 461, *phaeopasta* p. 462, *holoteles* p. 464, *patagiata* p. 465, *mendax* p. 466, *otiosa* p. 467, *pendula* p. 469, *iurbida* p. 470, *nigrosignata* p. 472, *querula* p. 473, *ecaudata* p. 474, *sparsiseta* p. 475, *mystica* p. 476, **spp. n.** Japan, ALEXANDER Ann. Mag. N. H. (9) **14.**—*T. nephrotomoides* **sp. n.** p. 14, (*Acutipula* **subgen. n.**) *gaboonensis* Alexander p. 11, *sjöstedti* **sp. n.** p. 12 C. Africa fig., ALEXANDER Ark. Zool. **16** no. 18.—*T. perexigua* **sp. n.** Montana p. 15, ALEXANDER Proc. U. S. Nat. Mus. **64** art. 10.—*T. fumida* p. 602, *bipenicillata* p. 603, **spp. n.**, *insulicola* **subsp. n.** *fuscicauda*, *westwoodiana* p. 604, *coquillettiana* p. 605, *verecunda* p. 606, *tantula* p. 607, *matsumuriana* p. 608, **spp. n.** Japan, ALEXANDER Phil. J. Sci. **24.**—*T. öklandi* **sp. n.** Novaya Zemlya p. 8, ALEXANDER Rept. Norw. Exp. Nov. Zeml. no. 5 1922.—*T. foliacea* p. 73, *macrotrichiata* p. 443, *kiushiuensis* p. 444, *nigrocostata* p. 445, **spp. n.** Japan, ALEXANDER Ann. Ent. Soc. Amer. **17.**—*T. oleracea*, synonymy, distribution, anatomy, BODENHEIMER Arch. Natg. **90** A 2 pp. 61–108 fig., Zs. wiss. Zool. **121** pp. 393–441 fig. — *T.*, notes and

synonymy, *cheethami* p. 82, *yerburyi* p. 84, **spp. n.** Britain figs., EDWARDS Ent. Mo. Mag. **60.**—*T. lateralis* and allies, synonymy of Finnish pp. 84–87, LACKSCHEWITZ Not. ent. **4.**—*T. bifurcata* p. 84, *fulvicolor* p. 85 France, *pallidicosta* Corsica p. 86, *anormalipennis* p. 90, *atlas* p. 91, *cinereicolor* p. 92 Morocco, **spp. n.** fig., PIERRE Encyc. ent. Dipt. **1.**

Toxorhina longicollis **sp. n.** Venezuela p. 80 fig., PIERRE Encyc. ent. Dipt. **1.**

Trentepohlia brevicellula Fiji p. 44, *tarsalis* Queensland p. 181 **spp. n.**, ALEXANDER Ann. Mag. N. H. (9) **13.**

Tricyphona gaudens p. 440, *optabilis* p. 70, *arisana* p. 71, **spp. n.** Japan, ALEXANDER Ann. Ent. Soc. Amer. **17.** —*T. arthuriana* **sp. n.** New Zealand p. 375, ALEXANDER Ann. Mag. N. H. (9) **13.**—*T. rainieria* **sp. n.** Washington p. 13, ALEXANDER Proc. U. S. Nat. Mus. **64** art. 10.—*T. sumatrana* **sp. n.** Sumatra p. 8 figs., DE MEIJERE Tijd. Ent. **67** Suppl.—*T. kuwanai, novempunctata, symphyletes, trispinosa* see *Nipponomyia.*

Troglophila **subgen. n.** see *Limnophila.*

Ula perelegans p. 572, *cincta* p. 573, Japan **spp. n.**, ALEXANDER Phil. J. Sci. **24.**

Zelandoglochina **subgen. n.** see *Dicranomyia.*

Zelandomyia penthoptera **sp. n.** New Zealand p. 371, ALEXANDER Ann. Mag. N. H. (9) **13.**—*Z. pallidula* **sp. n.** N.Z. p. 301, ALEXANDER op. cit. **14.**

STRATIOMYIDAE.

The phylogenetically older Stratiomyid subfamilies (Xylophaginae, Chiromyzinae, Solvinae, Beridinae and Coenomyiinae), ENDERLEIN Mitt. Zool. Mus. Berlin **10** 1921 pp. 153–214 16 figs.

Revision of Australian Chiromyzini with keys to tribes and genera, HARDY Proc. Linn. Soc. N.S.W. **49** pp. 360–370 fig.

Palaearctic Stratiomyinae, notes and keys, PLESKE Not. ent. **4** pp. 14–25 & 65–73.

Actina key and synonymy of Australian species pp. 38–40, HARDY Proc. R. Soc. Queensland **36.**—*A. nigricornis* **sp. n.** Tasmania p. 191, ENDERLEIN Mitt. Zool. Mus. Berlin **10** 1921.

Allactina **gen. n.** for *Beris viridis* Say p. 24, CURRAN Can. Ent. **56.**

Allognosta tessmanni Spanish Guinea p. 182, *annulifemur* Ceylon, *maxima, fuscipennis* p. 183, *partita* Formosa, *stigmaticalis* India p. 184, *limbativentris* Paraguay p. 185, **spp. n.**, ENDERLEIN Mitt. Zool. Mus. Berlin **10** 1921.

Alphapachygaster **subgen. n.** see *Pachygaster.*

Apospasma **gen. n.** p. 197, *famelicum* **sp. n.** N.S. Wales p. 198 fig., ENDERLEIN t.c.—*A. famelicrum* Enderlein see *Xanthoberis silacea* White.

Archimyza **gen. n.** *ava* **sp. n.** Queensland p. 157, ENDERLEIN t.c. — See *Chiromyza.*

Archisolva **gen. n.** *carinifrons* **sp. n.** Sunda Is. p. 187 fig., ENDERLEIN t.c.

Archistratiomys brasiliensis **sp. n.**, Brazil p. 190, ENDERLEIN t.c.

Beris viridis Say see *Allactina.*

Boreoides (=*Psegmoptera*, End.) *subulatus* (=*P. aurifrons*, End.) p. 364, HARDY Proc. Linn. Soc. N.S.W. **49.**

Chelonomima signata **sp. n.** Sumatra p. 10, DE MEIJERE Tijd. Ent. **67** Suppl.

Chiromyza Wied. (=*Archimyza* End., *Stenimas* End., *Hylorops* End.) p. 365, HARDY Proc. Linn. Soc. N.S.W. **49.**—*C. longicornis* **sp. n.** Queensland p. 366 fig., HARDY Proc. Linn. Soc. N.S.W. **49.** —*C. lineata* p. 158, *parvicornis, annulipes, murcicornis* p. 159, **spp. n.** Brazil, ENDERLEIN Mitt. Zool. Mus. Berlin **10** 1921.

Clavimyia **gen. n.** (Chiromyzinae) *alticola* **sp. n.** Peru p. 160 figs., LINDNER Zool. Anz. **60.**

Coenomyia bituberculata **sp. n.** India p. 213, ENDERLEIN Mitt. Zool. Mus. Berlin **10** 1921.

Culcua nigra **sp. n.** Indo-China p. 67, BRUNETTI Encyc. ent. Dipt. **1.**

Cyphomyia auricollis **sp. n.** Indo-China p. 70 fig., BRUNETTI t.c.

Ephippium aurofasciatum **sp. n.** Indo-China p. 68, BRUNETTI t.c.

Eumecacis **gen. n.** p. 211, *clavigera* **sp. n.** N.S. Wales p. 212 fig., ENDERLEIN Mitt. Zool. Mus. Berlin **10** 1921.

Evaza nigrispinis **sp. n.** Sumatra p. 10, DE MEIJERE Tijd. Ent. **67** Suppl.

Exaeretina **gen. n.** p. 194, *auricoma* **sp. n.** Chile p. 195, ENDERLEIN Mitt. Zool. Mus. Berlin **10** 1921.

Hanauia sikkimensis India p. 171, *flavicoxis* Paraguay, *verpa* Borneo, *luzonensis* Philippines p. 172, *micholitzi* Borneo p. 173 **spp. n.**, ENDERLEIN t.c.

Hemiberis **gen. n.** type *quadridentata* Walk. p. 209, ENDERLEIN t.c.

Hemimegacis **gen. n.** *maculifrons* **sp. n.** Bolivia p. 209, ENDERLEIN t.c.

Hermione see *Oxycera.*

Heteracantha violaceiventris **sp. n.** Brazil ? p. 201, ENDERLEIN t.c.

Hoplocantha nigripes p. 201, *solox* Japan, *amoena* Formosa p. 202, *compta* India p. 203, *cincticornis* p. 204, *tristis* Brazil, *lanuginosa* Argentina, *subcrassicalx* p. 205, *viriata, latifrons* Peru p. 206, *similis* Chile, *formosa* Colombia, *annulipes* Venezuela p. 207, *peruana* Peru, *iubata* Bolivia and Peru p. 208, **spp. n.**, ENDERLEIN t.c.

Huttonella **gen. n.**, type *alpina* Hutton p. 195, ENDERLEIN t.c.

Hylorops **gen. n.** *philippii* Chile p. 179, *matruelis* Australia p. 180 **spp. n.**, ENDERLEIN t.c.—See *Chiromyza.*

Kolomania **gen. n.** p. 99, *pilosa* **sp. n.** E. Siberia p. 100, PLESKE Encyc. ent. Dipt. **1.**

Macromeracis **gen. n.** type *thoracica* Phil. p. 211, ENDERLEIN Mitt. Zool. Mus. Berlin **10** 1921.

Mesomyza **gen. n.** *interrupta, tenuicornis* Brazil, *sericea* Bolivia, **spp. n.** p. 162, ENDERLEIN t.c.

Neactina **gen. n.** *opposita* **sp. n.** N. Zealand p. 193, ENDERLEIN t.c.

Negritomyia cyanea **sp. n.** Indo-China p. 69, BRUNETTI Encyc. ent. Dipt. **1.**

Neoexaereta viriolata **sp. n.** N. Zealand p. 194 fig., ENDERLEIN Mitt. Zool. Mus. Berlin **10** 1921.

Nonacris longicornis, scutellaris Colombia p. 164, *nigriventris* Ecuador and Colombia, *brevicornis, partitifrons* Brazil p. 165, **spp. n.** fig., ENDERLEIN t.c.

Oxycera (*Hermione*) *hungarica* **sp. n.** Hungary p. 9, KERTÉSZ Folia ent. hung. **1.**

Pachygaster (*Alphapachygaster* **sub-gen. n.**) key to subgenera p. 96, PLESKE Encyc. ent. Dipt. **1.**

Psegmoptera **gen. n.** p. 177, *aurifrons, machiliformis* **spp. n.** Australia p. 178, ENDERLEIN Mitt. Zool. Mus. Berlin **10** 1921.—See *Boreoides.*

Ptecticus vitalisi **sp. n.** Indo-China p. 70 fig., BRUNETTI Encyc. ent. Dipt. **1.** —*P. kertészi* **sp. n.** Sumatra p. 11, DE MEIJERE Tijd. Ent. **67** Suppl.

Rhachicerella **gen. n.**, type *honesta* O.-S. p. 167, ENDERLEIN Mitt. Zool. Mus. Berlin **10** 1921.

Solva nigriventris **sp. n.** Sumatra p. 12, DE MEIJERE t.c.—*S. binghami* p. 169, *nigricoxis* p. 170, **spp. n.** India and Formosa, ENDERLEIN Mitt. Zool. Mus. Berlin **10** 1921.

Spartimas **gen. n.** *ornatipes* p. 196, *formosanus* p. 197, **spp. n.** Formosa, ENDERLEIN t.c.

Stenimas **gen. n.** *stemmaticalis* **sp. n.** N. Australia p. 175, ENDERLEIN t.c.—See *Chiromyza.*

Tinda vitalisi **sp. n.** Indo-China p. 67 fig., BRUNETTI Encyc. ent. Dipt. **1.**

Xanthoberis silacea White (=*Apospasma famelicrum* End.) pp. 553-554 1 fig., HARDY Rec. S. Aust. Mus. **2.**

Xenomorpha tristrigata Peru & Bolivia p. 161, *stylicornis* Brazil p. 165 **spp. n.**, ENDERLEIN Mitt. Zool. Mus. Berlin **10** 1921.

Xylomyia nubila Spain, *gigas* Himalayas, **spp. n.** p. 168, ENDERLEIN t.c.

TABANIDAE.

Notes on Surcouf's treatment of the Tabanidae in the Genera Insectorum and on Enderlein's proposed new classification, BEQUAERT Psyche **31** pp. 24–40.

Key to the Pangoniinae of the Ethiopian region, BEQUAERT Rev. zool. afr. **12** p. 466.

Notes on the nomenclature of Australian Tabanidae: Subfamily Pangoniinae, FERGUSON Bull. Ent. Res. **14** pp. 251–263.

Bibliography of Tabanid larvae, STAMMER Zs. Morph. Oekol. **1** p. 167.

Internal morphology of Tabanid larvae, STAMMER Zs. Morph. Oekol. **1** p. 121 figs.

Chrysops key to Palestine spp. p. 421, *compacta* **sp. n.** Palestine p. 422 fig., AUSTEN Bull. Ent. Res. **14.**—*C. atrivittata* **sp. n.** Moluccas p. 317 fig., SCHUURMANS STEKHOVEN Treubia **5.**—*C. hyalinus* **n. n.** for *vitripennis* Shannon nec Mg. p. 178, SHANNON Proc. Ent. Soc. Wash. **26.**

Glaucops **subgen. n.** see *Tabanus.*

Haematopota kemali Asia Minor p. 32, *araxis* no locality, *aegyptium* Egypt p. 33, *tamerlani* no locality p. 34, *desertorum* Amur, *graeca* Poros Is. p. 35, *pseudo-lusitanica* Portugal **spp. n.**, *minuscula* **var. n.** *turkestanica* E. Siberia, *italica* **var. n.** *gallica* Dalmatia ? p. 37, *pluvialis* **var. n.** *hispanica* Europe p. 38, *variegata* **var. n.** *rotundata* N. Africa p. 39 figs., SZILADY Biol. Hung. **1.**

Nuceria mayombensis **sp. n.** Belgian Congo p. 464, BEQUAERT Rev. zool. afr. **12.**

Osca guttipennis **sp. n.** S. & W. Australia p. 259, FERGUSON Bull. Ent. Res. **14.**

Pangonia krausei **sp. n.** Sardinia p. 65, SURCOUF Encyc. ent. Dipt. **1.**—*P. argentata* p. 25, *flavocincta* p. 26, *lucida* p. 28 Asia Minor, *hannibal* Spain p. 26, *villosa* Tunis, *striata* Sardinia p. 28 **spp. n.**, *marginata* **varr. n.** *medio-argentata*, *basiargentata* Mediterranean district p. 23, *variegata* **var. n.** *brunneipes* Italy p. 26, *maculata* **var. n.** *aethiops* Morocco p. 27 figs., SZILADY Biol. Hung. **1.**—*P.* (*Pangonius*) *rodhaini* **sp. n.** Belgian Congo p. 462, BEQUAERT Rev. zool. afr. **12.**

Tabanus cuspidatus **sp. n.** Palestine p. 428 fig., AUSTEN Bull. Ent. Res. **14.**—*T. glaucopis* breeding places p. 17, BURTT Ent. Mo. Mag. **60.**—*T. crassus*, life-history and identity of female pp. 59–62 fig., ISAAC Mem. Dept. Agric. India **8.**—*T.* (*Therioplectes*) keys p. 63, *nigricorpus* C. Asia p. 72, *longipalpis* Sicily p. 83 **spp. n.**, *montanus* **var. n.** *immaculiventris* Turkestan p. 103, KRÖBER Arch. Natg. **89** A 12.—*T.*, key p. 13, *philippensis* p. 25, *griseoscutellatus* p. 27, **spp. n.** Philippines, KRÖBER Arch. Natg. **90** A 1.—*T. angustilimbatus* Ceylon p. 389, *demellonis* India p. 391, **spp. n.**, SENIOR-WHITE Spolia Zeylanica **12.**—*T. brunneothorax* **sp. n.** Moluccas p. 313 fig., SCHUURMANS STEKHOVEN Treubia **5.**—*T.* (*Therioplectes*) *muhlfeldi* **var. n.** *bezzii* Italy p. 22, SURCOUF Ann. Soc. ent. Fr. **93.**—*T. bromius* early stages pp. 232–237 fig., SURCOUF & FISCHER Bull. Soc. ent. Fr. **1924.**—*T. strix* p. 1, *tinnunculus* p. 2, *albopruinosus* p. 6 Mesopotamia, *cuculus* p. 2, *appendiculatus*, *accipiter* p. 3, *hunnorum*, *turkestanus* p. 8 (with **varr. n.** *minor*, *ater* p. 9) Turkestan, *geminus* p. 3 Amur, *vulpes* Jerusalem, *bromiolus* Asia Minor p. 4, *caucasi* Caucasus p. 5, *arpadi* Lapland & Amur p. 7, *grandis* Asia Minor p. 9, *goleanus* Algiers p. 10, *ptolemaeanus* Egypt p. 11 **spp. n.**; *lunatus* **varr. n.** *syriacus* p. 5, *politus* Syria, *rufus* Italy & Dalmatia p. 6, *farinosus* Finland p. 20; *rusticus* **var. n.** *parallelifrons* Siberia; *tartaricus* **varr. n.** *bicolor* p. 10, *aurantiacus*, *zonatus* Central Asia; *decorus* **var. n.** *defasciatus* Syria p. 11, *eggeri* **var. n.** *prometheus* Caucasus p. 12, (*Glaucops* **subgen. n.**) *hirsutus* Vill. p. 17 figs., SZILADY Biol. Hung. **1.**—*T. phaenops*, *insuetus* early stages pp. 20–29 fig., WEBB & WELLS U.S. Dept. Agric. Bull. **1218.**—*T. punctifer* larva pp. 13–17 fig., BÖVING in WEBB & WELLS t.c.—*T. monoensis* **sp. n.** California p. 29 fig., HINE in WEBB & WELLS t.c.

Therioplectes see *Tabanus.*

LEPTIDAE (RHAGIONIDAE).

Key to subfamilies of Rhagionidae LINDNER Konowia **2** 1923 p. 3.

Revision of Palaearctic Rhagionidae figs., LINDNER Flieg. Pal. Reg. **20** pp. 1–32.

Atherix neotropica Peru p. 68, *chrysopiliformis* Bolivia p. 69, **spp. n.**, LINDNER Konowia **3**.

Atrichops apollinis **sp. n.** Greece p. 5, LINDNER Konowia **2** 1923.

Bicalcar **gen. n.** for *Chrysopilus obscuripennis* Loew p. 4, LINDNER t.c.

Chrysopilus asiaticus p. 9, *claricinctus* p. 10 **spp. n.** Central Asia, *erythrophthalmus* (= *Rhagio hyalipennis*), *Rhagio cinereofasciatus*, *tristis* transferred to p. 10, LINDNER t.c. → *C. philippi* Peru p. 70, *andicola* Bolivia p. 71, *aymara* p. 72, *inka*, *hybrida* p. 73, *schnusei* p. 74, Peru **spp. n.**, LINDNER Konowia **3**.—*C. lugubrinus* p. 12, *tomentosus* **spp. n.**, *simillimus* ♂ p. 13, Sumatra, DE MEIJERE Tijd. Ent. **67** Suppl.—*C. obscuripennis* Loew see *Bicalcar*.

Leptis pallidistigma **sp. n.** Sumatra p. 14, DE MEIJERE Tijd. Ent. **67** Suppl.

Neorhagio **gen. n.** type *Rhagio setosus* Phil. p. 75, LINDNER Konowia **3**.

Rhachicerus aterrimus **sp. n.** Ceylon p. 389, SENIOR-WHITE Spol. Zeyl. **12**.

Rhagio mongolicus p. 6 Amur, *beckeri* p. 7 Corsica, *freyae* p. 8 Alps **spp. n.**, *immaculatus* **subsp. n.** *hähnleae*; *scolopaceus* **subsp. n.** *hähnlei* p. 9, (*hyalipennis* Ros. =) *Chrysopilus erythrophthalmus* Loew; *cinereo-fasciatus*, *tristis* transferred to *Chrysopilus* p. 10; *matsumurae* **n. n.** for *annulatus* Big. p. 11, LINDNER Konowia **2** 1923.—*R. setosus* Phil. see *Neorhagio*.

THEREVIDAE.

Therevidae of the District of Columbia, keys, COLE, MALLOCH & MCATEE Proc. Ent. Soc. Wash. **26** pp. 191–193.

Revision of Palaearctic Therevidae, KRÖBER Flieg. Pal. Reg. **26** pp. 1–32 figs.

Notes on Egyptian Therevidae, KRÖBER Bull. Soc. R. ent. Egypte **1923** 1924 pp. 85–107 fig.

Athereva **subgen. n.** see *Thereva*.

Caenophanomyia kröberi **sp. n.** S. Africa p. 28, BRAUNS Arch. Natg. **90** A 1.

Orthactia micans **sp. n.** Egypt p. 93 fig., KRÖBER Bull. Soc. R. ent. Egypte **1923** 1924.

Phycus bicinctus **sp. n.** Egypt p. 87 fig., KRÖBER t.c.

Thereva (*Hermannia*) *alaimontana* **n. n.** for *lanata* Kröb., *Athereva* **subgen. n.** p. 28, KRÖBER Flieg. Pal. Reg. **26**.—*T.*, key p. 101, *fulvicornis* **sp. n.** Egypt p. 105 fig., KRÖBER Bull. Soc. R. ent. Egypte **1923** 1924.

Xestomyzina aegyptiaca **sp. n.** Egypt p. 88 fig., KRÖBER t.c.

SCENOPIDAE (OMPHRALIDAE).

Scenopinidae of the District of Columbia, COLE, MALLOCH & MCATEE Proc. Ent. Soc. Wash. **26** p. 193.

Notes on Egyptian Omphralidae, KRÖBER Bull. Soc. R. ent. Egypte **1923** 1924 pp. 70-85 fig.

Caenoneura **gen. n.** *robusta* **sp. n.** Egypt p. 75 fig., KRÖBER t.c.

Omphrale fraterna **sp. n.** Egypt p. 82 fig., KRÖBER t.c.

Scenopinus opacus **sp. n.** Sumatra p. 14, DE MEIJERE Tijd. Ent. **67** Suppl.

CYRTIDAE.

Cyrtidae of the District of Columbia, keys, COLE, MALLOCH & MCATEE Proc. Ent. Soc. Wash. **26** p. 181.

Oncodes javanus **sp. n.** Java p. 210, DE MEIJERE Tijd. Ent. **67**.

NEMESTRINIDAE.

Revision of S. African Nemestrinidae, BEZZI Ann. S. Afr. Mus. **19** p. 164.

Fallenia semenovi **sp. n.** Persia p. 149, PARAMONOW Konowia **3**.

Nycterimyia capensis **sp. n.** S. Africa p. 168, BEZZI Ann. S. Afr. Mus. **19**.

Prosoeca key p. 173, *rubicunda* p. 177, *nitidula* p. 178, *robusta* p. 180, *major* p. 181, *ignita* p. 183, *lichtwardti* p. 185, *connexa* p. 188, **spp. n.** S. Africa, BEZZI t.c.

Stenobasipteron key, *minimum* **sp. n.** S. Africa p. 171, BEZZI t.c.

MYDAIDAE.

Cephalocera key p. 228, *brachycera* **sp. n.** S. Africa p. 231, BEZZI Ann. S. Afr. Mus. **19.**

Ectyphus key p. 195, *armipes* p. 196 (with **subsp. n.** *pretoriensis* p. 197), *abdominalis* p. 198, **spp. n.** S. Africa, BEZZI Ann. S. Afr. Mus. **19.**

Halterorchis **gen. n.** *inermis* **sp. n.** p. 217 S. Africa, BEZZI t.c.

Haplomydas **gen. n.** p. 199, *crassipes* **sp. n.** p. 200 S. Africa, BEZZI t.c.

Leptomydas key p. 202, *luctuosus* p. 204, *lanipes* p. 207, *nitidus* p. 209, *braunsi* p. 211, *opacus* p. 213, *flavirostris* p. 214, *subclausus* p. 216, **spp. n.** S. Africa, BEZZI t.c.

Mydas fasciatus Wied. see *Nomoneura.*

Mydaselpis **gen. n.** p. 218, *péringueyi* p. 220, *variolosus* p. 221, **spp. n.** S. Africa, BEZZI t.c.

Nomoneura **gen. n.** type *Mydas fasciatus* Wied. p. 223, key, *paradoxa* **sp. n.** p. 224, S. Africa, BEZZI t.c.

Syllegomydas key p. 158, *spinipes* p. 160, *efflatouni* p. 163, **spp. n.** Egypt, BEZZI Bull. Soc. R. ent. Egypte **1923** 1924.

ASILIDAE.

Revision of Diptera Asilica in Linnaea Entomologica 1848-49, BECKER Rev. Loew. Dipt. Asil. 1923 91 pp. 5 pls.

Notes on Asilidae, COLE Pan-Pacific Ent. **1** p. 7–13 fig.

Ablautus squamipes **sp. n.** Arizona p. 11, COLE Pan-Pacific Ent. **1.**

Antiphrisson adpressus **var. n.** *candidus* Vill. S. Tunis p. 68, VILLENEUVE & GAUTHIER Bull. Soc. Hist. nat. Afr. N. **15.**

Anypodetus notes p. 100, *fascipennis* p. 103, *semirufus* **spp. n.** p. 104, Cape Colony, ENGEL Wiener ent. Ztg. **41.**

Asilus cacopilogus Hine see *Erax.*

Astochia sareptana **sp. n.** Russia and Turkestan p. 89, BECKER Rev. Loew. Dipt. Asil. 1923.

Ceraturgus key p. 11, *elizabethae* p. 8, *mitchelli* p. 9, *mabelae* p. 11, **spp. n.** N. Carolina, BRIMLEY Ent. News **35.**

Cerdistus key p. 70, *candidus*, *indifferens* N. Africa p. 72, *junctus* p. 73, *penicissus*, *perplexus* p. 74, *flavipyga* p. 75, *sareptae* p. 77 Russia, *tenellus* p. 75, *pulcher* p. 76, *marinus*, *debilis* p. 78, *jubatus* p. 79 Europe **spp. n.**, figs., BECKER Rev. Loew. Dipt. Asil. 1923.

Conosiphon **subgen. n.** see *Machimus.*

Cyrtopogon nitidus **sp. n.** Washington p. 10 fig., COLE Pan-Pacific Ent. **1.** —*C. platycauda* p. 251, *bigelowi* p. 277, *albovarians* p. 279, **spp. n.** Canada, CURRAN Can. Ent. **56.**

Dioctria key p. 16, *abdominalis* Asia Minor p. 171, *conspicua* Spain p. 172, *contraria* Germany p. 173, *cretensis* Crete, *lenta* Asia Minor p. 174, *mixta* Morea p. 174, *puerilis* Silesia p. 176, *samarana* S. Russia p. 177, *segmentaria* Algeria p. 178 **spp. n.** *hyalipennis* Fbr. (=*flavipes* Meig.), *gracilis* Meig. (= *hyalipennis* Meig.), BECKER Konowia **2** 1923.

Dysmachus key p. 12, *setipyga* Asia Minor p. 21, *foliiformis* p. 22, *poecilus* p. 24, *bidentatus* p. 25 Russia, *obtusus*, *pendulus* p. 23, *perturbans* p. 24, *rectus* p. 25, *lacteipennis* Europe, *digitulus* Tunis p. 28 **spp. n.** figs., BECKER Rev. Loew. Dipt. Asil. 1923.

Erax cacopilogus Hine (from *Asilus*) p. 73, CURRAN J. N. Y. Ent. Soc. **32.**

Eutolmus key p. 30, *annulatus* p. 31, *mediocris* p. 32, *brunnicosus* p. 33, **spp. n.** Europe, BECKER Rev. Loew. Dipt. Asil. 1923.

Holopogon atrifrons **sp. n.** California p. 8, COLE Pan-Pacific Ent. **1.**

Hyperechia habits, Nairobi p. 121 figs., POULTON Trans. Ent. Soc. **1924.**

Laphria hermanni **sp.n.** Sumatra p. 15, DE MEIJERE Tijd. Ent. **67** Suppl.

Lasiopogon bivittatus spermatogenesis p. 153 figs., METZ & NONIDEZ Biol. Bull. Wood's Hole **46.**—*L. littoris* **sp. n.** California p. 8 fig., COLE Pan-Pacific Ent. **1.**

Machimus (*Conosiphon* **subgen. n.**) *similis* p. 36, *alter* p. 37, **spp. n.** N. Africa, key p. 38, *krüperi* Greece p. 41, *perniciosus* Turkestan p. 42, *laevis* p. 43, *intricans* p. 51, *divisus* p. 52 N. Africa, *mystacinus* Smyrna p. 44, *pyrenaicus* p. 45, *debilis* p. 50 Pyrenees, *sareptanus* S. Russia p. 46, *linearis* Spain p. 48, *rudis* Asia Minor, *dubiosus* Croatia p. 49, *gracilis* France p. 57 figs. **spp. n.**, BECKER Rev. Loew. Dipt. Asil. 1923.

Parataracticus **gen. n.** p. 11, *rubidus* **sp. n.** fig. California p. 12, COLE Pan-Pacific Ent. **1.**

Perasis key p. 104, ENGEL Wiener ent. Ztg. **41.**

Plesiomma fuliginosum habits Brazil p. 150, BRISTOWE Ent. Mo. Mag. **60.**

Tolmerus key p. 58, *illucens* Syria p. 60, *eximius* p. 61, *ferox* p. 62, *impiger* p. 64, *perfectus* p. 65, *albiceps* p. 66, Spain, *pauper* p. 62, *planifacies* p. 66, Russia, *ventriculus* Morea, *incommunis* Germany p. 63, *paganus* Caucasus p. 65, *grandipyga* Algeria p. 67 **spp. n.** fig., BECKER Rev. Loew. Dipt. Asil. 1923.

Trichardis notes p. 106, *grisescens* **sp. n.** S. Africa p. 108, ENGEL Wiener ent. Ztg. **41.**

BOMBYLIIDAE.

The Bombyliidae of the Ethiopian Region, BEZZI Brit. Mus. (Nat. Hist.) 1924 viii+390 pp. 46 figs.

Notes on Australian Bombyliidae, keys, HARDY Pap. & Proc. R. Soc. Tasmania **1923** pp. 72–86.

Bombyliidae of the District of Columbia, keys, COLE, MALLOCH & MCATEE Proc. Ent. Soc. Wash. **26** pp. 183–191.

Acrodisca **subgen. n.** see *Exoprosopa.*

Anastoechus macrorrhynchus p. 74, *rubicundus* p. 75 **spp. n.** Africa, BEZZI, t.c.

Antonia cirrhata p. 138, *xanthogramma* p. 140, *nigrifrons* p. 141, **spp. n.** Africa, BEZZI t.c.

Anthrax Scopoli (nec auctt.) (= *Argyramoeba*, sens. lat.) *diffusus* **var. n.** *majusculus* Belgian Congo p. 162, *nigerrimus* **sp. n.** Kenya p. 164, **subsp. n.** *ocellatus* Uganda p. 165, BEZZI t.c.

Anthrax apicalis see *Exoprosopa* (*Pterobates*); *A. leucostoma* see *Villa leucochila.*

Aphoebantus bilobatus **sp. n.** Abyssinia p. 150, BEZZI t.c.

Argyramoeba see *Anthrax.*

Bombylius flagrans p. 33, *bombiformis* fig. p. 34, *bicoloratus* p. 36, *plorans* p. 39, *lugens*, *nigrilobus* p. 40, *fuscilobus* p. 41, *tripudians* p. 43, *auricomus* p. 44 **spp. n.**, *ornatus* **var. n.** *pleuralis* p. 43, *modestus* **var. n.** *phaeopterus* p. 46, *acutus* p. 47, *luteipennis* p. 49, *parallelus* p. 51, *femoralis* p. 52, *melanopus* p. 53, *disjunctus* p. 54, *obtusus* p. 56, *simplicipennis* p. 59, *bifidus* p. 61, **spp. n.** Africa, BEZZI t.c.

Chalcochiton bisalbifrons **sp. n.** Cyrenaica p. 147, BEZZI Mem. Soc. ent. ital. **1** 1922.

Chiasmella **gen. n.** (near *Chionamoeba*) p. 156, *brevipennis* **sp. n.** Arabia p. 157, BEZZI Bombyl. Eth. Reg.

Cladodisca **subgen. n.** see *Exoprosopa.*

Corsomyza bipustulata, *anceps* **spp. n.** Cape Colony p. 106, BEZZI t.c.

Dicranoclista **gen. n.** p. 178, *simpsoni* **sp. n.** Gambia p. 180 fig., BEZZI t.c.

Dischistus aurifluus p. 90, *rufirostris* p. 92, *lepidus* p. 93, *gemmeus* p. 94, *nucalis* p. 96, *farinosus* p. 97, *gibbicornis* p. 98 **spp. n.** Africa, BEZZI t.c.—*D. cylindricus* Bezzi, *leucophys* Bigot, *xanthinus* Bezzi see *Gonarthus.*—*D. eximius* ♂ described p. 149, BEZZI Mem. Soc. ent. ital. **1** 1922.

Eurycarenus melanurus p. 80, *albicans* p. 82, *dichopticus* p. 83, **spp. n.** Africa fig., BEZZI Bombyl. Eth. Reg.

Exoprosopa, *Mesoclis* **subgen. n.** for *pygmalion* F. p. 229; *Metapenta* **subgen. n.** type *pentala* Macq. p. 230, *cadicerina* **sp. n.** p. 232; *Acrodisca* **subgen. n.** type *angulata* Loew p. 234, *haustellata* p. 236, *polyspila* p. 238, *spoliata* p. 239, *rubella*, *violacea* p. 241, **spp. n.**; *Cladodisca* **subgen. n.** type *suffusa* Klug p. 243; *E.* (*Trinaria*) *rutiloides* **sp. n.** p. 247; *E.* (*Defilippia*) *villosa* p. 253, *compar* p. 255, *nigerrima* p. 256, *dolichoptera* p. 257, *nigrovenosa* p. 259, *connivens* p. 261, *curvicornis* p. 262, *eclipsis* p. 268, *flavicans* p. 269,

mydasiformis p. 271 **spp. n.**; *Pterobates* **subgen. n.** type *Anthrax apicalis* Wied. p. 273; *E.* (*Exoprosopa*) *decipiens* p. 287, *fastidiosa* p. 291, *rectifascia* p. 292, *scalaris* p. 294, *infumata* p. 295, *obtusa* p. 297, *protuberans* p. 298, *retracta* p. 300, *contorta*, *clausina* p. 301, *angusta* p. 302, *rubescens*, *nigritella* p. 304, *diluta* p. 306, *stenomelaena* p. 307, *albofimbriata* p. 308, *perpulchra* p. 310, *triplex* p. 311 **spp. n.**; *tricolor* **subsp. n.** *orientalis* p. 313; *gentilis* p. 314, *melanaspis* p. 316, *nigrispina*, *nigrina* p. 317, *punctifrons* p. 318, *palustris* p. 320, *fuscula* p. 321, *aurulans* p. 322, *albata* (with **var. n.** *novaeformis*) p. 323, *conochila* p. 335, *decolor* p. 326, *latifrons* p. 327, *pallida* p. 329, *poeciloptera* p. 333, *cosmoptera* p. 335, *tabanoides* p. 337, *referta* p. 338, *linearis* p. 339, *goliath* p. 341, *brevinasis* p. 343, *magnipennis* p. 344, *thoracica* p. 347, *mesopleuralis* p. 348, *albonigra* p. 349, *pediformis* p. 351, *serva* p. 353, *erronea* p. 354, *brachycera* p. 355, *ancilla* p. 356, *chionea* p. 357, *latissima* p. 358, *chrystallina* p. 359, **spp. n.** Africa figs., Bezzi t.c.—*E. zanoni* **sp. n.** Cyrenaica p. 143 fig., Bezzi Mem. Soc. ent. ital. **1** 1922.—*E. affinissima* **sp. n.** Ceylon p. 392 fig., Senior-White Spolia Zeylanica **12.**

Geron nasutus Nyasaland p. 114, *barbatus* S. Africa p. 115, **spp. n.**, Bezzi Bombyl. Eth. Reg.

Gonarthrus **gen. n.** (near *Crocidium*) p. 109 for *Dischistus cylindricus* Bezzi p. 111, *leucophys* Bigot, *xanthinus* Bezzi p. 112, Africa, Bezzi t.c.

Hyperalonia paris p. 366, *atricosta* p. 367, *virgo* p. 369, *transiens* p. 370, *mars* p. 373 (with **subsp. n.** *vulcanus* p. 375), *cupido* p. 377 **spp. n.** Africa figs., Bezzi t.c.—*H. argyura* **sp. n.** Java [?] p. 209, de Meijere Tijd. Ent. **67.**

Hyperusia **gen. n.** (near *Corsomyza*) p. 107, *luteifacies* **sp. n.** Natal p. 108 fig., Bezzi Bombyl. Eth. Reg.

Isocnemus **gen. n.** (near *Bombylius*) *nemestrinus* **sp. n.** Abyssinia p. 101, Bezzi t.c.

Litorrhynchus corticeus **var. n.** *corticalis* p. 214, *suberosus* p. 215, *siccifolius* p. 216, *pseudocollaris* p. 219, *infuscatus* p. 221, *metapleuralis* p. 224, *obumbratus*, *suspensus* p. 226, *productus* p. 227, **spp. n.** Africa, Bezzi t.c.

Lomatia neavei p. 143, *punctifrons* p. 146, *spiloptera* p. 148, **spp. n.** Nyasaland fig., Bezzi t.c.—*L. persica* p. 41, *shelkovnikovi* p. 43, *montana* p. 45, *armeniaca* p. 46, **spp. n.** Armenia, Paramonow N. Beitr. syst. Ins. **3.**

Mesoclis **subgen. n.** see *Exoprosopa.*

Metapenta **subgen. n.** see *Exoproopa.*

Mythicomyia californica Califonia p. 61, *minutum* New Mexico p. 62, **spp. n.**, Greene Proc. Ent. Soc. Wash. **26.**

Pachyneres **gen. n.** (near *Mythicomyia*) *crassicornis* **sp. n.** Washington p. 62 fig., Greene t.c.

Petrorossia hesperus **var. n.** *tropicalis* p. 152, *fuscicosta* **sp. n.** p. 153 Africa, Bezzi Bombyl. Eth. Reg.

Pterobates **subgen. n.** see *Exoprosopa.*

Sisyrophanus neavei p. 85, *abdominalis* p. 86, *minor* p. 87, **spp. n.** Africa, Bezzi t.c.

Spongostylum subanthrax p. 169, *quinquemaculatum* p. 170, *saturatum* p. 173, *ventrale* p. 174, *princeps* p. 176 **spp. n.** Africa fig., Bezzi t.c.—*S. karavaievi* **sp. n.** Transcaspia p. 136 fig., Paramonow Konowia **3.**

Systoechus chrystallinus p. 65, *phaes opterus* p. 66, *mentiens* p. 68, *exilipes* p. 69, *austeni* p. 71, **spp. n.** Africa, Bezzi Bombyl. Eth. Reg.

Systropus marshalli p. 118, *rugosus* p. 123, *sericeus* p. 124, *bicuspis* p. 126, *trigonalis* p. 127, **spp. n.** Africa fig., Bezzi t.c.

Thyridanthrax triangularis p. 195, *pseudoflammiger*, *beckerianus* p. 197, *luteolus* p. 200, *transiens* p. 203, *subperspicillaris* p. 207, *incipiens* p. 208, *ternarius* p. 209, **spp. n.** Africa fig., Bezzi t.c.

Toxophora punctipennis **sp. n.** Natal p. 133, Bezzi t.c.

Villa validicornis p. 184, *chrysothrix* p. 186, *atrisquama* p. 187 **spp. n.**, *leucochila* **n. n.** for *Anthrax leucostoma* Wied. p. 188, *candidata* **sp. n.** p. 188, Africa, Bezzi t.c.—*V.* (*Exhyalanthrax*) *transcaspica* **sp. n.** Transcaspia p. 137 fig., Paramonow Konowia **3.**

EMPIDAE.

Acarterus varipes **sp. n.** Ceylon p. 394, SENIOR-WHITE Spol. Zeyl. **12.**

Atalanta hirtiloba **sp. n.** E. Prussia p. 13 fig., SPEISER Schr. physik. Ges. Königsberg **64.**

Rhamphomyia armipes **sp. n.** Novaya Zemlya p. 6 figs., SACK Rept. Norw. Exp. Nov. Zeml. no. 15 1923.

Synechus jardinei p. 395, *peradeniyae*, p. 396, *maculithorax* p. 397, **spp. n** Ceylon, SENIOR-WHITE Spol. Zeyl. **12.**

Tachydromia latistrigata **sp. n.** Sumatra p. 16, DE MEIJERE Tijd. Ent. **67** Suppl.—*T. eximia* **sp. n.** p. 84, *engadinica* **var. n.** *infuscata* p. 88 Switzerland, OLDENBERG Ent. Mitt. **13.**—*T. nana* **sp. n.** Würtemberg p. 235, OLDENBERG D. ent. Zs. **1924.**—*T. monticola* **sp. n.** Ceylon p. 399, SENIOR-WHITE Spol. Zeyl. **12.**

DOLICHOPODIDAE.

Revision of S. African Dolichopodidae, CURRAN Ann. Transvaal Mus. **10** p. 212.

Aphrosylus (*Paraphrosylus*) key to subgenus p. 73, *nigripennis* Alaska p. 75, *fumipennis* p. 76, *tenuipes* p. 77 Gulf of California, **spp. n.**, VAN DUZEE Pan-Pacific Ent. **1.**

Asyndetus versicolor **sp. n.** Galapagos p. 88, JOHNSON Zoologica **5.**

Condylostylus imitator **sp. n.** Rhodesia p. 221, CURRAN Ann. Transvaal Mus. **10.**

Campsicnemus maculatus p. 124, *lucidus*, *intermittens* p. 125, *glaucus* p. 126, *obscuratus* p. 127, **spp. n.** Formosa, BECKER Zool. Meded. **8.**

Chrysosoma sauteri p. 127, *subnigrum* p. 128, *interrogatum* p. 129, *griseicolle* p. 130, **spp. n.** Formosa, BECKER t.c.—*C.*, key, *auratum* p. 217, *munroi*, *ernestum* p. 218, **spp. n.** S. Africa, CURRAN Ann. Transvaal Mus. **10.**—*C.*, key to Philippine p. 116, *discophorum* p. 117, *niveoapicale*, *grallator* p. 118, *annuliferum*, *chrysoleucum* p. 119, *fistulatum*, *excitatum* p. 120, *platychirus* p. 121, *fusiforme*, *philippinense* p. 122, *schistellum* p. 123, **spp. n.** Philippines, FREY Not. ent. **4.**

Chrysotus albisignatus, *incumbens*, *lividiventris* p. 123, *mobilis* p. 124, **spp. n.** Formosa, BECKER Zool. Meded. **8.**—*C. indifferens*, *basilaris* **spp. n.** S. Africa p. 231, CURRAN Ann. Transvaal Mus. **10.**—*C.*, systematic notes p. 281, *varians* KOW. (= *pulvillatus* Parent) p. 298, *verralli* p. 301 no locality, *collini* p. 304 England **spp. n.**, key to palaearctic spp. p. 306, PARENT Ann. Soc. sci. Bruxelles Mem. **42.**

Diaphorus ochripes **sp. n.** Formosa p. 122, BECKER Zool. Meded. **8.**—*D.*, key, *inversus* **sp. n.** S. Africa p. 474, CURRAN Rev. zool. afr. **12.**—*D. cylindricus* **sp.n.** Quebec p. 248, VAN DUZEE Can. Ent. **56.**—*D. morio* **sp. n.** Sumatra p. 17, DE MEIJERE Tijd. Ent. **67** Suppl.—*D. brunneus* see *Munroiana.*

Dolichopus andersoni **sp. n.** Br. Columbia p. 304, CURRAN Can. Ent. **56.**—*D. nigrilineatus* **sp. n.** Alberta p. 249, VAN DUZEE Can. Ent. **56.**

Hercostomus perturbus **sp. n.** Pretoria p. 225, CURRAN Ann. Transvaal Mus. **10.**—*H.*, key p. 469, *nectarophagus* **sp. n.** S. Africa p. 470 fig., CURRAN Rev. zool. afr. **12.**—*H. praetentans* **sp. n.** Assam p. 108 figs., LAMB Rec. Ind. Mus. **26.**—*H. beckeri* Italy p. 85, *forcipatus* Bavaria p. 86 **spp. n.** fig., MUELLER Verh. zool.-bot. Ges. Wien **73.**

Hydrophorus purus **sp. n.** Manitoba p. 193, CURRAN Can. Ent. **56.**—*H. claripennis* p. 246, *ampullaceus* p. 247, **spp. n.** Canada, VAN DUZEE Can. Ent. **56.**

Lamprochromus notes on genus p. 242, PARENT Ann. Soc. sci. Bruxelles C.R. **43.**

Mastigomyia **gen. n.** p. 121, *ratiosa* **sp. n.** Formosa p. 122, BECKER Zool. Meded. **8.**—*Medeterus* key, *normalis* p. 226, *longitarsis*, *simplicis* p. 227, **spp. n.** S. Africa, CURRAN Ann. Transvaal Mus. **10.**—*M. trisetosus*, **sp. n.** Canada p. 246, VAN DUZEE Can. Ent. **56.**

Munroiana **gen. n.** for *Diaphorus brunneus* p. 229, CURRAN Ann. Transvaal Mus. **10.**

Nematoproctus imperialis **sp. n.** S. Africa p. 228, CURRAN t.c.

Neurigona terminalis p. 244, *planipes, cilimanus* p. 245, **spp. n.** Canada, VAN DUZEE Can. Ent. **56.**—*N. univittatus* Loew see *Tenuopus.*

Nothosympycnus, synopsis of Canadian p. 110, *tarsalis* **sp. n.** Ontario p. 108, CURRAN Can. Ent. **56.**

Paraphrosylus see *Aphrosylus.*

Pelastoneurus gracilis **sp. n.** S. Africa p. 222, CURRAN Ann. Transvaal Mus. **10.**

Poecilobothrus nobilitatus habits p. 75, BROCHER Ann. Biol. lac. **13.**

Psilopus hirtiventris **sp. n.** Sumatra p. 16, DE MEIJERE Tijd. Ent. **67** Suppl.

Rhaphium campestris p. 133, *punctitarsis* p. 135, *armatum* p. 136, *canadense* p. 137, *petchi* p. 138, *spinitarsis* p. 139, *arboreum* p. 140, **spp. n.** Canada, CURRAN Can. Ent. **56.**—*R. subarmatum, gracilis* **spp. n.** New England p. 228, CURRAN Psyche **31.**

Scellus, synopsis of N. American, 18 pp. 3 pls., GREENE Proc. U.S. Nat. Mus. **65** art. 16.

Sciopolina **gen. n.** *fasciata* **sp. n.** S. Africa p. 216, CURRAN Ann. Transvaal Mus. **10.**

Sciopus subtilis **sp. n.** Formosa p. 130, BECKER Zool. Meded. **8.**—*S. trochanteralis* **sp. n.** S. Africa p. 219, CURRAN Ann. Transvaal Mus. **10.**

Sympycnus, synopsis of Canadian p. 110, CURRAN Can. Ent. **56.**—*S.* key, *nectarophagus* **sp. n.** S. Africa p. 472, CURRAN Rev. zool. afr. **12.**

Syntormon key to males of N. American p. 276, *ornatipes* p. 277, *femoratum* p. 280, *clavatum* p. 281, *bisinuatum* p. 282, *dissimilipes* p. 283, *simplicitarse* p. 286, **spp. n.** U.S.A. figs., VAN DUZEE Trans. Amer. Ent. Soc. **50.**

Systenus lamelliger **sp. n.** Tyrol, Italy p. 87 fig., MUELLER Verh. zool.-bot. Ges. Wien **73.**

Tachytrechus key p. 222, *alternatus, capensis* p. 223, **spp. n.** S. Africa, CURRAN Ann. Transvaal Mus. **10.**—*T.* of France, keys etc. pp. 19–64, PARENT Encyc. ent. Dipt. **1.**—*T. spinitarsis* **sp. n.** California p. 43, VAN DUZEE Pan-Pacific Ent. **1.**—*T. fedtschenkoi* **sp. n.** Turkestan p. 12, VON STACKELBERG Ent. Mitt. **13.**

Tenuopus **gen.n.** for *Neurigona univittatus* Loew p. 228, CURRAN Ann. Transvaal Mus. **10.**

PHORIDAE.

Notes on Phoridae from South Africa BRUES Psyche **31** pp. 87–91 fig.

Wing venation in classification of Phoridae, ENDERLEIN Ent. Mitt. **13** p. 271.

Corrections to and notes on the Phoridae described by P. G. Strobl, SCHMITZ Ent. Medd. **14** pp. 314–322.

A case of "boreal-alpine" distribution in Phoridae, SCHMITZ Wiener ent. Ztg. **41** pp. 55–57.

Notes on Phoridae, SCHMITZ Natuurhist. Maandbl. **13** pp. 129–131.

Chaetotaxy of Phoridae, SCHMITZ Schr. physik. Ges. Königsberg **63** 1922 p. 130.

Acanthophora see *Acanthophorides.*

Acanthophorides **n. n.** for *Acanthophora* p. 202, BORGMEIER Bol. Mus. Nac. Rio de Janeiro **1.**

Acontistoptera ecitonis **sp. n.** Brazil p. 195 fig., BORGMEIER t.c.

Aenigmatistes key & synonymy p. 290, *nudus* p. 294, *latifrons* p. 298 **spp. n.** *herero* ♂ described p. 297, Africa figs. SCHMITZ Zool. Anz. **59.**

Allochaeta **gen. n.** *excedens* p. 168, *metatarsalis* p. 170 **spp. n.** Brazil fig., BORGMEIER Bol. Mus. Nac. Rio de Janeiro **1.**

Aphiochaeta setifer S. Africa p. 88, *velutinipes* Missouri p. 158, *opaciventris* Grenada p. 159, key to Formosan p. 209, *formosana* p. 212, *pedicellata* p. 213, *brunnicans* p. 215, *breviuscula* p. 217, *simplicior* p. 219, *lanceolata* p. 220 Formosa, **spp. n.,** BRUES Psyche **31.**—*A. apicinebula* **sp. n.** Maryland p. 355, MALLOCH Ent. News **35.**—*A. pseudoscalaris,* India p. 399, *achatinae* Ceylon p. 401 **spp. n.,** SENIOR-WHITE Spol. Zeyl. **12.**—*A. brevimana* p. 15, *angularis* p. 16, **spp. n.,** *maura* **var. n.** *perdistans* p. 17 E. Prussia, SPEISER Schr. physik. Ges. Königsberg **64.**—*A. brevior* **sp. n.** Germany, *maura* var. *perdistans* Schmitz a distinct species, p. 130, SCHMITZ Natuurhist. Maandbl. **13.**

Apocephalus key p. 23, *borealis* **sp. n.** Maine fig. p. 41, BRUES Psyche **31.**

Assmutherium **gen. n.** *rostratum* **sp. n.** India p. 301 figs., SCHMITZ Zool. Anz. **59.**

Auxanommatidia **gen. n.** (near *Apocephalus*) *variegata* **sp. n.** Brazil p. 175 fig., BORGMEIER Bol. Mus. Nac. Rio de Janeiro **1.**

Beckerina aliena **sp. n.** Maryland p. 356, MALLOCH Ent. News **35.**

Borgmeierella **gen. n.** type *pachycostalis* Borgm. p. 279, ENDERLEIN Ent. Mitt. **13.**

Borophaga **gen. n.** type *flavimana* Meig. p. 277, ENDERLEIN t.c.

Brachycephaloptera **gen. n.** (near *Apocephalus*) *trichopleura* **sp. n.** Brazil p. 172 fig., BORGMEIER Bol. Mus. Nac. Rio de Janeiro **1.**

Conicera kempi **sp. n.** Assam p. 106, BRUNETTI Rec. Ind. Mus. **26.**—*C. latimana* **sp. n.** Porto Rico p. 73, MALLOCH Proc. Ent. Soc. Wash. **26.**

Ctenostichus **gen. n.** type *flavipennis* **sp. n.** Formosa p. 280, ENDERLEIN Ent. Mitt. **13.**

Cyphometopis **gen. n.** p. 283, *carinifrons* **sp. n.** p. 284 fig., BORGMEIER Bol. Mus. Nac. Rio de Janeiro **1.**

Dohrniphora rhinotermitis **sp. n.** Australia p. 4, SCHMITZ & MJÖBERG Ark. Zool. **16** no. 9.

Ecitophora collegiana p. 198, *aequalis* p. 201, **spp. n.** Brazil fig., BORGMEIER Bol. Mus. Nac. Rio de Janeiro **1.**

Ecitocantha **gen. n.** (near *Echidnophora*), type *bruchi* **sp. n.** Argentina p. 287, BORGMEIER t.c.

Ecitoptera maculifrons p. 188, *proboscidalis* p. 189, **spp. n.** Brazil fig., BORGMEIER t.c.—*E. maior* **sp. n.** Brazil p. 9 fig., SCHMITZ Mus. Nac. Rio de Janeiro Publ. no. 4.

Hypocera key p. 155, *adamsi* **sp. n.** Missouri p. 156, BRUES Psyche **31.**

Lepidomyia see *Lepidophoromyia.*

Lepidophoromyia **n. n.** for *Lepidomyia* p. 202, BORGMEIER Bol. Mus. Nac. Rio de Janeiro **1.**

Lioyella **gen. n.** type *flava* Fall. p. 275, ENDERLEIN Ent. Mitt. **13.**

Mallochina sauteri **sp. n.** Formosa p. 222, BRUES Psyche **31.**

Melaloncha rubricornis **sp. n.** Brazil p. 17, BORGMEIER Soc. ent. **39.**

Nemosia incrassata Meig. see *Peromitra.*

Neopuliciphora **gen. n.** *microphthalma* **sp. n.** Australia p. 5 fig., SCHMITZ & MJÖBERG Ark. Zool. **16** no. 9.

Parametopina **gen. n.** (near *Metopina*) p. 185, *spinipleura* **sp. n.** Brazil p. 186 fig., BORGMEIER Bol. Mus. Nac. Rio de Janeiro **1.**

Paraspiniphora jugorum **sp. n.** Styria p. 319, SCHMITZ Ent. Medd. **14.**

Peromitra **n. n.** for *Nemosia incrassata* Meig. p. 278, ENDERLEIN Ent. Mitt. **13.**

Phalacrotophora appendicigera **sp. n.** Brazil p. 13 figs., BORGMEIER Soc. ent. **39.**—*P. punctifrons* **sp. n.** Formosa p. 207, BRUES Psyche **31.**

Pogonopleura **gen. n.** type *ciliata* Zett. p. 275, ENDERLEIN Ent. Mitt. **13.**

Puliciphora trisclerita **sp. n.** Ceylon p. 402 fig., SENIOR-WHITE Spol. Zeyl. **12.**

Stenoneurellys **gen. n.** (near *Syneura*) *convergens* **sp. n.** Brazil p. 182 fig., BORGMEIER Bol. Mus. Nac. Rio de Janeiro **1.**

Stichillus **gen. n.** *acutivertex* p. 279, *flavicinctus* p. 280, **spp. n.** Paraguay, ENDERLEIN Ent. Mitt. **13.**

Syneura furcellata **sp. n.** Brazil p. 18, fig., BORGMEIER Soc. ent. **39.**

Termitophorides heterospinalis **sp. n.** Brazil p. 192 fig., BORGMEIER Bol. Mus. Nac. Rio de Janeiro **1.**

Trichostiria **gen. n.** type *irregularis* Wood p. 278, ENDERLEIN Ent. Mitt. **13.**

Trupheoneura microcephala notes Maine p. 92, BRUES Psyche **31.**

Tubicera frœsmanni **sp. n.** Brazil p. 180 fig., BORGMEIER Bol. Mus. Nac. Rio de Janeiro **1.**

PIPUNCULIDAE.

Pipunculus pernitidus p. 14, *similans*, *bicolor* p. 15, *aequalis*, *costalis* p. 16, **spp. n.** Formosa, BECKER Ent. Mitt. **13.**

SYRPHIDAE.

List of Thuringian Syrphidae, GUNDERMANN Ent. Rdsch. **41** p. 109.

Notes on and synonymy of the Syrphidae of India, HERVÉ-BAZIN Ann. Soc. ent. Fr. **92** pp. 289–299.

Achoanus **gen. n.** *hulleyi* **sp. n.** S. Africa p. 87 figs., MUNRO Ann. Transvaal Mus. **10.**

Baccha tinctiventris p. 21, *luteolimbata* p. 22, *nigriceps*, *umbrifera* p. 23, **spp. n.** Sumatra, DE MEIJERE Tijd. Ent. **67** Suppl.—*B. dacipennis* **sp. n.** Congo p. 44, SPEISER Wiener ent. Ztg. **41.**

Catabomba odessana **sp. n.** Russia p. 249, PARAMONOW Konowia **3.**

Cerioides uralensis **sp. n.** Ural p. 89 fig., BECKER Mitt. Zool. Mus. Berlin **10** 1921.—*C. proxima* **sp. n.** New England p. 228, CURRAN Psyche **31.**—*C. bulbosa* **sp. n.** Sumatra p. 18, DE MEIJERE Tijd. Ent. **67** Suppl.—*C.*, ♂ genitalia p. 349, *sartorum* **sp. n.** p. 350, SMIRNOV Zool. Anz. **58.**—*C. petersi* **sp. n.** Philippines p. 53, SPEISER Wiener ent. Ztg. **41.**

Chilosia modesta Hungary p. 24, *imperfecta* Italy p. 25 **spp. n.**, BECKER Mitt. Zool. Mus. Berlin **10** 1921.—*C. saxifragae* **sp. n.** Tyrol p. 243, HERING Zs. Morph. Oekol. Tiere **2.**—*C. fulvipes*, *capitalis* **spp. n.** N. Zealand p. 282, MILLER Trans. N. Z. Inst. **55.**—*C. tupro* **sp. n.** Japan p. 42, SPEISER Wiener ent. Ztg. **41.**

Chrysochlamys sumatrensis **sp. n.** Sumatra p. 24, DE MEIJERE Tijd. Ent. **67** Suppl.

Chrysogaster key to males p. 20, females p. 22, BECKER Mitt. Zool. Mus. Berlin **10** 1921.—*C.* (*Liochrysogaster* **subgen. n.**) *przewalskii* **sp. n.** Chinese Turkestan p. 25, DE STACKELBERG Wiener ent. Ztg. **41.**

Chrysotoxum key p. 72, *derivatum* Caucasus and Siberia, *impressum* Greece p. 76, *latifasciatum* p. 77, *gracile* Spain, *rossicum* Baikal p. 78, *asiaticum* Mongolia p. 80, **spp. n.** fig., BECKER Mitt. Zool. Mus. Berlin **10** 1921.—*C.*, key to N. American p. 34, *luteopilosum* p. 36, *occidentale* p. 37 **spp. n.**, *integre* **var. n.** *willistoni* p. 39, N. America, CURRAN Can. Ent. **56.**

Criorhina maritima **sp. n.** Nova Scotia p. 252, CURRAN Can. Ent. **56.**

Cynorhina garretti p. 194, *bigelowi* **spp. n.** Canada, synopsis of spp. p. 195, CURRAN t.c.

Emmyia **gen. n.** *queenslandica* **sp. n.** Brisbane p. 55 fig., KLÖCKER Mem. Queensland Mus. **8.**

Eristalis auripila **sp. n.** Caucasus p. 53, BECKER Mitt. Zool. Mus. Berlin **10** 1921.—*E. bicornutus* **sp. n.** Java p. 216 fig., DE MEIJERE Tijd. Ent. **67.**—*E. cinereus* **sp. n.** Sumatra p. 20, DE MEIJERE Tijd. Ent. **67** Suppl.—*E. flavohirta* Dunk Island p. 58, *hervebazini* Brisbane p. 58, **spp. n.** fig., KLÖCKER Mem. Queensland Mus. **8.**—*E.*, parasitisation of cattle by larvae 11 pp., NATVIG Norsk Vet.-Tidsskr. **1924.**—*E. noctilio* **sp. n.** Congo p. 46, SPEISER Wiener ent. Ztg. **41.**

Eristalodes ampyx **sp. n.** Congo p. 48, SPEISER Wiener ent. Ztg. **41.**

Eumerus key to males p. 57, females p. 63, *nigrifacies* Transcaspia p. 66, *silesiacus* Silesia, *rubriventris* Syria, *maculipennis* p. 67, *grisescens* Transcaspia p. 68, *niveitibia* Greece, *leucopyga* France, *graecus* Greece p. 69, *clavatus* Tunis, *pallidifrons* Syria p. 70, *pauper* Spain p. 71, **spp. n.** fig., BECKER Mitt. Zool. Mus. Berlin **10** 1921.—*E. compertus* **sp. n.** S. Tunis p. 68, VILLENEUVE & GAUTHIER Bull. Soc. Hist. nat. Afr. N. **15.**

Ferdinandea key, *aeneicolor* **sp. n.** Oregon p. 214, SHANNON Proc. Ent. Soc. Wash. **26.**

Helophilus taruensis, *hectori* **spp. n.** N. Zealand p. 283, MILLER Trans. N. Z. Inst. **55.**

Lampetia portschinskyi **sp. n.** Transcaucasia p. 28, DE STACKELBERG Wiener ent. Ztg. **41.**

Liochrysogaster **subgen. n.** see *Chrysogaster.*

Melanostoma key p. 23, BECKER Mitt. Zool. Mus. Berlin **10** 1921.—*M. talamani* **sp. n.** Sumatra p. 21, DE MEIJERE Tijd. Ent. **67** Suppl.—*M. babyssola* **sp. n.** Kamerun p. 43, SPEISER Wiener ent. Ztg. **41.**

Merodon arrasus **sp. n.** Tangier p. 54 fig., BECKER Mitt. Zool. Mus. Berlin **10** 1921.—*M. bessarabicus* **sp. n.** Bessarabia p. 252, PARAMONOW Konowia **3.**—*M.* (*Lampetia*) *monticola* **sp. n.** Pyrenees p. 6, VILLENEUVE Encyc. ent. Dipt. **1.**

Meromacrus key p. 20, *obscurus* **sp. n.** N. America p. 21, HINE Bull. Brooklyn Ent. Soc. **19.**—*M. zonatus* variation p. 50, SPEISER Wiener ent. Ztg. **41.**

Microdon apidiformis **n. n.** for *apiformis* Brun. p. 153, BRUNETTI Rec. Ind. Mus. **26.**—*M. pseudoglobosus, conflictus* p. 226, *ocellaris, manitobensis* p. 227, **spp. n.** New England, CURRAN Psyche **31.**—*M. lativentris* **sp. n.** Sumatra p. 19, DE MEIJERE Tijd. Ent. **67** Suppl. —*M. newcomeri* **sp. n.** California p. 94, MANN Ann. Ent. Soc. Amer. **17.**—*M. aeolidiformis* **sp. n.** Panama p. 239 figs., WHEELER Proc. Nat. Acad. Sci. **10.**

Milesia, key to N. American, *scutellata* **sp. n.** U.S.A. p. 280, HULL Ent. News **35.**

Nothomicrodon **gen. n.** *aztecarum* **sp. n.** Panama p. 243 figs., WHEELER Proc. Nat. Acad. Sci. **10.**

Ocyptamus doralis **sp. n.** N. Zealand p. 284, MILLER Trans. N. Z. Inst. **55.**

Orthoneura key p. 14, *anomala* Silesia p. 16, *longior* Europe p. 17 **spp. n.**, BECKER Mitt. Zool. Mus. Berlin **10** 1921.

Paragus key p. 5, BECKER t.c.—*P. myersii* **sp. n.** N. Zealand p. 281, MILLER Trans. N. Z. Inst. **55.**

Pipizella key p. 10, *pyrenaica* Pyrenees, *punctipennis* Sarepta p. 11 **spp. n.**, BECKER Mitt. Zool. Mus. Berlin **10** 1921.

Platychirus ovalis **sp. n.** Ural p. 27 fig., BECKER t.c.

Pleskeola **gen. n.** (near *Tubifera*) *sibirica* **sp. n.** Siberia p. 25, DE STACKELBERG Wiener ent. Ztg. **41.**

Psilota rubra p. 53, *tristis, hirta* p. 54, **spp. n.** Brisbane, KLÖCKER Mem. Queensland Mus. **8.**

Rhingia basalis **sp. n.** Java p. 219, DE MEIJERE Tijd. Ent. **67.**

Rohdendorfia **gen. n.** (near *Platychirus*) *dimorpha* **sp. n.** Turkestan p. 94, SMIRNOV Ent. Mitt. **13.**

Spathiogaster aurantiaca **sp. n.** Siberia p. 29, BECKER Mitt. Zool. Mus. Berlin **10** 1921.

Sphaerophoria kerteszi **sp. n.** Brisbane p. 56, KLÖCKER Mem. Queensland Mus. **8.**—*S. nigrimana* California p. 41, *bridwelli* Oregon p. 42, *melanderi* Washington p. 43, *vittata* Washington p. 44, **spp. n.** figs., COLE Ent. News **35.**

Sphegina key to males p. 31, females p. 32, *cornifera* p. 34, *montana, germanica, rubripes* p. 35 Europe **spp. n.** figs., *zetterstedi* Schin. (= *nigricornis* Zett. nec Macq.) p. 36, BECKER Mitt. Zool. Mus. Berlin **10** 1921.

Syngenicomyia pellicea **sp. n.** Transbaikalia p. 88, BECKER Mitt. Zool. Mus. Berlin **10** 1921.

Syritta hackeri **sp. n.** Brisbane p. 59 fig., KLÖCKER Mem. Queensland Mus. **8.**

Syrphus key p. 38, *posticatus* Spain, *intermedius* Transbaikalia p. 49, *corsicanus, nitidifrons* p. 50, *monticola* Europe, *metatarsatus* Asia Minor p. 51, *cretensis* Crete p. 52, **spp. n.** fig., BECKER Mitt. Zool. Mus. Berlin **10** 1921. —*S. bigelowi* **sp. n.** Manitoba p. 288, CURRAN Can. Ent. **56.**—*S. serarioides* **sp. n.** Java p. 218, DE MEIJERE Tijd. Ent. **67.**

Temnostoma pauperius **sp. n.** Japan p. 51, SPEISER Wiener ent. Ztg. **41.**

Tubifera smirnovi **sp. n.** Gobi desert p. 28, DE STACKELBERG t.c.

Volucella bombylans mimicry pp. 321–353, GABRITSCHEVSKY Zs. indukt. Abstammgslehre Berlin **32.**

Xylota key p. 81, *puella* Madeira p. 85, *inermis* Transbaikalia p. 86, **spp. n.**, BECKER Mitt. Zool. Mus. Berlin **10** 1921.—*X. annulipes* **sp. n.** Sumatra p. 19, DE MEIJERE Tijd. Ent. **67** Suppl.

CONOPIDAE.

Notes on Egyptian Conopidae, KRÖBER Bull. Soc. R. ent. Egypte **1923** 1924 pp. 58–70 fig.

Revision of Palaearctic Conopidae, KRÖBER Flieg. Pal. Reg. **35** pp. 1–32 figs.

Conops morosa **sp. n.** Java p. 213, DE MEIJERE Tijd. Ent. **67.**

Physocephala key p. 60, *obscurefacies* **sp. n.** Egypt p. 67, KRÖBER Bull. Soc. R. ent. Egypte **1923** 1924.

OESTRIDAE.

Early stages of warble-flies of cattle, CARPENTER Mem. Proc. Manchester Lit. Phil. Soc. **68** p. vii.

Gastrophilus crossi **sp. n.** Punjab p. 963, PATTON Ind. J. Med. Res. **11.**

Hypoderma bovis, lineatum early stages p. 85, MACDOUGALL Scot. Nat. **1924.**

Muscidae Calyptratae.

Notes on some types of American Muscoid Diptera in the Vienna Natural History Museum, ALDRICH Ann. Ent. Soc. Amer. **17** pp. 209–218.

TACHINIDAE.

Notes on North American Tachinidae with synonymy of some of Townsend's genera, ALDRICH Ins. Insc. Mens. **12.**

Key to New Zealand genera of Calliphoridae, MALLOCH Trans. N. Z. Inst. **55** p. 638.

Male genitalia of Calliphorinae and of some Sarcophaginae, MUELLER Verh. zool.-bot. Ges. Wien **73** pp. 51–85 44 figs.

A revision of the subfamily Sarcophaginae in the Oriental Region, SENIOR-WHITE Rec. Ind. Mus. **26** pp. 193–283 12 pls.

New and little known Oriental Tachinidae, SENIOR-WHITE Spol. Zeyl. **13** pp. 103–119 figs.

Revised key to Calliphoridae, SHANNON Ins. Insc. Mens. **12** p. 14.

Primary larvae of Tachinids, THOMPSON Ann. Paras. hum. & comp. **2** pp. 185–201 279–306 fig.

Classification of Palaearctic Tachinidae, VILLENEUVE Ann. Sci. nat. Zool. (10) **7** p. 5 fig.

Actia suspecta **sp. n.** Bengal p. 409, MALLOCH Ann. Mag. N. H. (9) **13.**—*A.*, key, *nudibasis* p. 129, *articulata, fasciata* p. 130, *flaviceps* p. 134, **spp. n.** Central Europe, STEIN Arch. Natg. **90** Abt. A Heft 6.

Agria hutsoni **sp. n.** Ceylon p. 258, SENIOR-WHITE Rec. Ind. Mus. **26.**

Anthracomyia nitida v. Röd. see *Pseudoptilops.*

Apatelia **n. n.** for *Hypostena* Schiner nec Meig. p. 144, type *innoxia* Meig. p. 145, STEIN Arch. Natg. **90** A 6.

Appendicia **gen. n.** type *truncata* Zett. Europe p. 54, STEIN t.c.

Arctophyto key to N. American, *marginalis* **sp. n.** Br. Columbia p. 302, CURRAN Can. Ent. **56.**—*A. johnsoni, regina* **spp. n.** Massachusetts p. 187, WEST Psyche **31.**

Ateloglossa wheeleri **sp. n.** Connecticut p. 186, WEST Psyche **31.**

Bengalia siamensis N. Siam p. 106, *xanthopyga* Philippines p. 107, **spp. n.** fig., SENIOR-WHITE Spol. Zeyl. **13.**

Borisia **gen. n.**, *kuzini* **sp. n.** Russia p. 125 fig., ROHDENDORF Ent. Mitt. **13.**

Brachycoma devia viviparous habit p. 262, COLLINS Ent. Mo. Mag. **60.**

Bucentes nigripalpis **sp. n.** Java p. 223, DE MEIJERE Tijd. Ent. **67.**

Calliphora key to N. Zealand p. 640, MALLOCH Trans. N. Z. Inst. **55.**—*C. eudypti* Hutton see *Xenocalliphora.*

Catharosia flavicornis Zett. see *Procatharosia.*

Craspedothrix key, *veniseta* **sp. n.** Central Europe p. 140, STEIN Arch. Natg. **90** A 6.

Cuphocera aurifrons **sp. n.** Texas p. 54, REINHARD Ent. News **35.**

Cynomyiomima **gen. n.** *stackelbergi* **sp. n.** Mongolia p. 284, ROHDENDORF Ent. Mitt. **13.**

Dinera futilis **sp. n.** N. Jersey p. 191, WEST Psyche **31.**

Echinomyia angulata **sp. n.** Java p. 221, DE MEIJERE Tijd. Ent. **67.**

Eriothrix key, *micronyx* **sp. n.** Engadine p. 170, STEIN Arch. Natg. **90** A 6.

Ernestia, identity of genus pp. 214–215, (*Faustia ?*) *fasciata* **sp. n.** Br. Columbia p. 246, CURRAN Ent. News **35.**—*E.* key, *minor* **sp. n.** N. Europe p. 51, STEIN Arch. Natg. **90** A 6.

Erycia fatua **var. n.** *fasciata* France p. 7, VILLENEUVE Encyc. ent. Dipt. **1.**

Eulasiona nigra **sp. n.** Br. Columbia p. 194, CURRAN Can. Ent. **56.**

Euphormia key and chaetotaxy p. 282, ROHDENDORF Ent. Mitt. **13.**

Eutheresia montana **sp. n.** Vermont p. 188, WEST Psyche **31.**

Exorista key p. 67, *stolida* **n. n.** for *stulta* Pand. nec Zett. p. 80, *kramerella* **sp. n.** p. 82 Central Europe, STEIN Arch. Natg. **90** A 6.

Fabriciella, Nearctic spp. revised p. 237, key to ♂ ♂ p. 259, *acuminata* p. 260, *planiforceps* p. 261, *compressa, latigena, latifacies* p. 262, *spinosa, pilosa* p. 263, *nivalis, canadensis, brevirostris* p. 264, *longiunguis, hispida* p. 265, *latiforceps, spineiventer, latianulum* p. 266, *rostrata* p. 267, **spp. n.** N. America, TOTHILL Can. Ent. **56.**

Fallenia longicornis Fall. see *Latigena.*

Francilia **gen. n.** *alaskensis* **sp. n.** Alaska p. 74, SHANNON Ins. Insc. Mens. **12.**

Frontina ferruginea **sp. n.** Washington p. 269, REINHARD Ent. News **35.**

Genea in N. America p. 210, ALDRICH Ent. News **35.**

Goedartia fuscinervis **sp. n.** Central Europe, p. 105, STEIN Arch. Natg. **90** A 6.

Gonia key to nearctic males p. 197, *setigera* **sp. n.**, *senilis, sagax* p. 199, *turgida* p. 200 **spp. n.**, *porca* redescribed p. 206, *fissiforceps* **sp. n.**, *distincta* redescribed, *fuscicollis* p. 207, *longiforceps, carinata* **spp. n.**, *sequax* redescribed p. 208, *aldrichi* **sp. n.**, *frontosa* redescribed p. 209, *yukonensis, breviforceps* p. 210, *longipulvilli, brevipulvilli,* **spp. n.** N. America p. 211, TOTHILL Can. Ent. **56.**—*G. texensis* **sp. n.** Texas p. 357, REINHARD Ent. News **35.**

Graphogaster key, *maculiventris* **sp. n.** Croatia p. 249, STEIN Arch. Natg. **90** A 6.

Gymnostylia argentina **sp. n.** Argentina p. 21, BRÈTHES Inst. biol. Soc. rur. Argentina **1922.**

Hemyda latipennis **sp. n.** Manitoba p. 252, CURRAN Can. Ent. **56.**

Histochaeta inconspicua **sp. n.** Pyrenees p. 7, VILLENEUVE Encyc. ent. Dipt. **1.**

Hypostena Schiner nec Meig. see *Apatelia.*

Latigena **gen. n.** for *Fallenia longicornis* Fall. p. 104, STEIN Arch. Natg. **90** A 6.

Lucilia silvarum biology pp. 157–159 fig., LINDNER Zs. wiss. Insektenbiol. **19.**—*L. elongata* p. 76, *pallescens* p. 78, **spp. n.** U.S.A., SHANNON Ins. Insc. Mens. **12.**

Mericia triangularis p. 247, *alberta, fasciventris* p. 248, *campestris* p. 249, **spp. n.** Canada, CURRAN Ent. News **35.**

Myiocera isolata p. 188, *novae-angliae* p. 189, *protrudens* p. 190, **spp. n.** U.S.A., WEST Psyche **31.**

Nemoraea amoena Meig. (= *xanthogastra* Rond. = *analis* Macq.) p. 59, HECKEL Intern. ent. Zs. **18.**

Nemorilla key p. 5, *insolens* **sp. n.** Massachusetts p. 6, ALDRICH & WEBBER Proc. U. S. Nat. Mus. **63** art. 17.

Notoecus **gen. n.** type *longestylatus* Strobl p. 201, STEIN Arch. Natg. **90** A 6.

Onesia krameri **sp. n.** Bavaria, Tyrol p. 58 fig., MUELLER Verh. zool.-bot. Ges. Wien **73.**

Orectocerina **gen. n.** *atratula* **sp. n.** Malaya p. 521, MALLOCH Ann. Mag. N. H. (9) **14.**

Oxynops robusta **sp. n.** Texas p. 271, REINHARD Ent. News **35.**

Paraprosena magnipalpis **sp. n.** Cyrenaica p. 154, BEZZI Mem. Soc. ent. ital. **1** 1922.

Parasetigena platensis **sp. n.** Argentina p. 20, BRÈTHES Inst. biol. Soc. rur. Argentina **1922.**

Parestheria **gen. n.** *unicolor* **sp. n.** Central Europe p. 233, STEIN Arch. Natg. **90** A 6.

Phormia key and chaetotaxy p. 282, *boganidae* Er. redescribed p. 283, ROHDENDORF Ent. Mitt. **13.**

Phorocera victoria for *tenuiseta* A. & W. (nec Macq.), *nitelae* for *xanthura* A. & W. (nec Wulp) **nn. n.** p. 195, ALDRICH & WEBBER Proc. Ent. Soc. Wash. **26.**—*P.*, key p. 45, *virilis* p. 52, *coccíphila* p. 53 Washington, *divisa* Porto Rico p. 54, *complicata* Costa Rica, Panama p. 57, *hamata* p. 62, *imitator* p. 63, *indivisa, coccyx* p. 64, *subnitens* p. 65, *sulcata* p. 66, *specularis, pachypyga* p. 70 U.S.A., *setifrons* p. 71, *silvatica* p. 72 Canada, *pluriseriata, fuscimacula* p. 73, *reinhardi* p. 74, *texana* p. 79, *parviteres* p. 80, *xanthura* U.S.A., *tenuiseta* Br. Columbia p. 82, *unipilum,*

marginalis, halisidotae p. 84, *festinans* p. 85, *levis, signata* p. 86 U. S. A., **spp. n.**, ALDRICH & WEBBER Proc. U.S. Nat. Mus. **63** art. 17.

Phyto key, *similis* **sp. n.** Central Europe p. 179, STEIN Arch. Natg. **90** A 6.

Phytomyzoneura **gen. n.** *abnormis* **sp. n.** Budapest p. 141, STEIN Arch. Natg. **90** A 6.

Pilatea albicincta **sp. n.** Texas p. 272, REINHARD Ent. News **35.**

Pollenia rudis rearing records pp. 135–138, GARRISON Ent. News **35.**

Procatharosia **gen. n.** for *Catharosia flavicornis* Zett. p. 31, VILLENEUVE Ann. Sci. nat. Zool. (10) **7.**

Protocalliphora key and chaetotaxy p. 282, ROHDENDORF Ent. Mitt. **13.**—*P.*, key to N. American spp. p. 249, *avium* (with **var. n.** *asiovora*) p. 250, *hirudo* (with **var. n.** *cuprea*, **subsp. n.** *parva* p. 253) p. 252 **spp. n.**, *splendida* **varr. n.** *sialia, hesperia, aenea* **subsp. n.** *hirundo* p. 251, N. America, SHANNON & DOBROSCKY J. Wash. Acad. Sci. **14.**

Pseudoptilops **gen. n.** for *Anthracomyia nitida* v. Röd. p. 159, STEIN Arch. Natg. **90** A 6.

Ptiloceroides **gen. n.** for *Stevenia lateralis* Macq. p. 31, VILLENEUVE Ann. Sci. nat. Zool. (10) **7** p. 31.

Ptilodexia neotibialis **sp. n.** Connecticut p. 184, WEST Psyche **31.**

Rhynchodexia confusa **sp. n.** N. America p. 185, WEST Psyche **31.**

Salia sicilensis **sp. n.** Sicily p. 7, VILLENEUVE Encyc. ent. Dipt. **1.**

Sarcophaga carnaria **var. n.** *schulzi* p. 82, *lehmanni* **sp. n.** (with **var. n.** *clausa* Tyrol) p. 83 Europe fig., MUELLER Verh. zool.-bot. Ges. Wien **73.**—*S.*, key p. 222, *falculata* **var. n.** *persicae* p. 228, *flavinervis, gravelyi* p. 229, *aspinata* p. 230, *walayari* p. 231, *henryi* p. 232, *ostindicae, annandalei* p. 233 **spp. n.**, *knabi* **var. n.** *flavipalpis* p. 235, *beesoni, pattoni*, p. 242 **spp. n.**, *formosana* **n. n.** for *longicornis* Bött. nec Macq. p. 243, *orientaloides* p. 244, *pusana* p. 245, *khasiensis, futilis* p. 246, *martellata, kempi* p. 247 India, *tsushimae* Straits of Tsushima p. 248, *fuscicauda* (= *hutsoni*) p. 252, *fletcheri, ballardi*, p. 254 India **spp. n.** fig., SENIOR-WHITE Rec. Ind. Mus. **26.**—*S. banksi* **sp. n.** Philippines p. 117, SENIOR-WHITE Spol. Zeyl. **13.**

Sarcophila cinerea F. (= *alba* Schin.) p. 257, SENIOR-WHITE Rec. Ind. Mus. **26.**

Servillia key, *nigrohirta* **sp. n.** Central Europe p. 42, STEIN Arch. Natg. **90** A 6.

Steleoneura **gen. n.** *czernyi* **sp. n.** Spain p. 151, STEIN t.c.

Stenoparia **gen. n.** *monstrosicornis* **sp. n.** Central Europe p. 128, STEIN t.c.

Stevenia lateralis Macq. see *Ptiloceroides.*

Stomorhina biplumosa **sp. n.** N. Siam p. 110, SENIOR-WHITE Spol. Zeyl. **13.**

Strongyloneura nigricornis India and Buru Island p. 115, *apicipennis* Philippines p. 116, **spp. n.** fig., SENIOR WHITE t.c.

Sturmia chrysoprocta **sp. n.** Kansas p. 273, REINHARD Ent. News **35.**

Tachina larvarum, biology, pp. 202–206 4 figs., MATTHEY Ann. Paras. hum. & comp. **2.**—*T.*, key, *unicolor* **sp. n.** Dalmatia p. 114, STEIN Arch. Natg. **90** A 6.

Trichactia **gen. n.** type *securicornis* Egg. Central Europe p. 138, STEIN t.c.

Trichopoda pennipes biology and morphology pp. 7–16 and 57–77 fig., WORTHLEY Psyche **31.**

Turanogonia **gen. n.** *smirnovi* **sp. n.** Turkestan p. 228 **58**; ♀ described **60** p. 88, ROHDENDORF Zool. Anz.

Weberia albisquama **sp. n.** France p. 6, VILLENEUVE Encyc. ent. Dipt. **1.**

Winthemia key p. 58, *ligustri* **sp. n.** p. 59 Central Europe, STEIN Arch. Natg. **90** A 6.

Xenocalliphora **gen. n.** key p. 639, type *Calliphora eudypti* Hutton, MALLOCH Trans. N.Z. Inst. **55.**

Zenillia key p. 11, *protuberans* p. 15, *marginata* p. 17, *angustivitta, coquilletti* p. 18, *valens* p. 20, *coerulea, formosa* p. 23, *inflatipalpis* p. 24, *crassiseta* p. 29, *submissa* p. 30, *reclinata* p. 32 **spp. n.**, *blanda* **subsp. n.** *virilis* p. 40, U.S.A., ALDRICH & WEBBER Proc. U.S. Nat. Mus. **63** art. 17.

MUSCIDAE (*sens. strict.*),

ANTHOMYIIDAE.

Localities for the Dutch E. Indian Anthomyiidae in P. Stein's paper of 1919, JACOBSON Tijd. Ent. **67** Suppl. pp. 75–77.

Guide to the study of Tsetse-flies, NEWSTEAD Liverpool School Trop. Med. Mem. N.S. **1** 1924 xi + 268 pp. 4 maps, 28 pls., 59 figs.

Anacamptomyia morphology of larva and biology pp. 200–248 figs., ROUBAUD Ann. Sci. nat. (Zool.) **7.**

Anthomyia key p. 267, *indica* India p. 269, *spinigera* Kenya p, 270, *benguellae* p. 272, *griseobasis* p. 273 Africa **spp. n.,** MALLOCH Ann. Mag. N.H. (9) **14.**

Atherigona partial key p. 411, MALLOCH Ann. Mag. N. H. (9) **13.**—*A. tibiseta* **sp. n.** Sydney p. 145, MALLOCH Proc. Linn. Soc. N.S.W. **49.**—*A. brunneoapicata* **sp. n.** F.M.S. p. 518, MALLOCH Ann. Mag. N. H. (9) **14.**—*A. longiseta* **sp. n.** Philippines p. 74, MALLOCH Not. ent. **4.**

Calythea separata **sp. n.** N. America p. 198, MALLOCH Psyche **31.**

Coenosopsia **gen. n.** *prima* **sp. n.** Costa Rica p. 74, MALLOCH Proc. Ent. Soc. Wash. **26.**

Emnesomyia key to African spp., *natalia* **sp. n.** Natal p. 260, MALLOCH Ann. Mag. N.H. (9) **14.**

Eustalomyia steini **sp. n.** Pommerania p. 189, SCHROEDER Stett. ent. Ztg. **84.**

Fannia key to American ♂ ♂ p. 416, *curvipes* p. 421, *pallidiventris* p. 422, *canadensis, abrupta* p. 423 **spp. n.** N. America, synonymy, *immaculata* **n. n.** for *nigra* Stein (nec Malloch) p. 424, MALLOCH Ann. Mag. N. H. (9) **13.**—Key to N. American ♀ ♀ p. 515, MALLOCH op. cit. (9) **14.**

Glossina schwetzi **var. n.** *disjuncta* Belgian Congo p. 205, POTTS Ann. Trop. Med. & Paras. **18.**

Graphomyia luteicornis **sp. n.** Ceylon p. 405, SENIOR-WHITE Spol. Zeyl. **12.**

Haphospatha **gen. n.** (near *Stomoxys*) p. 51, *hirudo* **sp. n.** Kamerun p. 52, ENDERLEIN Konowia **3.**

Helina calyptrata p. 142, *flavofusca, imitatrix* p. 143, **spp. n.** Australia, MALLOCH Proc. Linn. Soc. N.S.W. **49.** —*H.*, notes on and keys to Swedish pp. 45–66, *latitarsis* **n. n.** for *nivalis* Stein p. 54, *suecica* **sp. n.** Sweden p. 60, *setiventris* **n. n.** for *duplaris* Stein p. 64, RINGDAHL Ent. Tidsk. **45.**

Hoplogaster key to N. American males p. 171, *morrisoni* **sp. n.** New Hampshire p. 172, MALLOCH Ent. News **35.**

Hydrophoria packardi **sp. n.** Labrador p. 514, MALLOCH Ann. Mag. N. H. (9) **14.**

Hydrotoea key to African p. 258, MALLOCH Ann. Mag. N. H. (9) **14.**

Hylemyia holosteae **sp. n.** Germany p. 232, HERING Zs. Morph. Oekol. Tiere **2.**—*H.*, key p. 138, *urbana* p. 139 **sp. n.** Australia, MALLOCH Proc. Linn. Soc. N.S.W. **49.**—*H. sinuata* Massachusetts p. 196, *longipalpis* Maine p. 197, **spp. n.,** MALLOCH Psyche **31.**—*H.*, key to African p. 262, *sinensis* **var. n.** *intensa* p. 263, *andersoni* p. 264, *capensis* p. 265, *griseopunctata* p. 266, **spp. n.** Africa, MALLOCH Ann. Mag. N. H. (9) **14.**—*H. coarctata* biology pp. 713–759 fig., ROSTRUP Tidsskr. Planteavl. **30.**

Limnophora megastoma Boh. (= *arctica* Bech.) p. 204, COLLIN Ann. Mag. N. H. (9) **14.**—*L. opacifrons, nigriorbitalis, orthoneura* **spp. n.** Australia p. 144, MALLOCH Proc. Linn. Soc. N.S.W. **49.**

Lypha arctica **sp. n.** Novaya Zemlya p. 7 fig., SACK Rept. Norw. Exp. Nov. Zeml. no. 15 1923.

Musca, keys to Oriental pp. 557, 560, *fletcheri* **sp. n.** fig. India p. 574, PATTON & SENIOR-WHITE Rec. Ind. Mus. **26.**

Mydaea, keys to Swedish pp. 40–45, *tincta* **var. n.** *setifemur* p. 42, *bengtssoni* **sp. n.** p. 44 Sweden, RINGDAHL Ent. Tidsk. **45.**

Neohelina **gen. n.** p. 414, *semivittata* **sp. n.** N. S. Wales p. 415, MALLOCH Ann. Mag. N. H. (9) **13.**

Neohydrotaea **gen. n.** *hirtipes* **sp. n.** Massachusetts p. 202, MALLOCH Psyche **31.**

Neoroubaudia **subgen. n.** see *Roubaudia.*

Orthellia scatophaga **sp. n.** S. Africa p. 519, MALLOCH Ann. Mag. N. H. (9) **14.**

Pegomyia kempi **sp. n.** Assam p. 101, BRUNETTI Rec. Ind. Mus. **26.**—*P. hyoscyami* **subsp. n.** *silenes* Hungary p. 37 fig., HERING Zs. wiss. Insektenbiol. **19.**

Phaonia signata notes p. 350, GIL Bol. R. Soc. esp. Hist. nat. **24.**—*P. fergusoni* **sp. n.** Australia p. 141, MALLOCH Proc. Linn. Soc. N. S.W. **49.**

Roubaudia morphology of larva and biology pp. 200–248, *Neoroubaudia* **subgen. n.** p. 207, key, figs., ROUBAUD Ann. Sci. nat. (Zool.) **7.**

Spilogona argenticeps **sp. n.** fig. N. Hampshire p. 200, MALLOCH Psyche **31.**

Muscidae Acalyptratae.

Revision of Palaearctic Muscidae Acalyptratae HENDEL Konowia **2** 1923 p. 203.

SCATOMYZIDAE

(including CORDYLURIDAE & SCATOPHAGIDAE).

Americina treated as subgen. of *Chylizosoma* **gen. n.** p. 83, HENDEL Ent. Mitt. **13.**

Chylizosoma **gen. n.** from *Parallelomma* to include *Americina* p. 83, HENDEL t.c.

Cordylura luteola **sp. n.** Oregon p. 14, MALLOCH Pan-Pacific Ent. **1.**

Megophthalma americana **sp. n.** Oregon p. 14, MALLOCH t.c.

Microprosopa flavinervis **sp. n.** Massachusetts p. 193, MALLOCH Psyche **31.**

Orthochaeta dissimilis **sp. n.** Illinois p. 194, MALLOCH Psyche **31.**

Parallelomma, division of, p. 83, HENDEL Ent. Mitt. **13.**

Scatophaga monticola **sp. n.** N. Hampshire p. 195, MALLOCH Psyche **31.**

BORBORIDAE.

Allosphaerocera see *Sphaerocera.*

Aptilotus notes on N. American p. 70, SPULER Pan-Pacific Ent. **1.**

Collinella see *Leptocera.*

Coprophila pseudolugubris **sp. n.** Germany p. 179 fig., DUDA Verh. zool.-bot. Ges. Wien **73.**

Leptocera (*Collinella*) *modesta* p. 170, *pseudohostica* p. 172 Hungary, *zernyi* Sicily p. 180 **spp. n.**, *Pseudocollinella*, *Paracollinella* **subgg. n.** p. 166 fig., DUDA Verh. zool.-bot. Ges. Wien **73.**—*L.* (*Opacifrons*) *grandis* p. 123, (*O.*) *sciaspidis* p. 124, (*O.*) *caelobata* p. 126, (*O.*) *pellucida* p. 127, (*O.*) *wheeleri* p. 128, (*O.*) *convexa* p. 130, (*Pteremis*) *parvipennis* p. 132, (*P.*) *flavifrons* p. 133, (*P.*) *unica* p. 134, **spp. n.** figs. U.S.A., SPULER Psyche **31.**—*L.*, keys pp. 107 & 114, (*Collinella*) *echinaspis* California p 108, (*C.*) *trigonata* Costa Rica p. 109, (*C.*) *fumipennis* Br. Columbia p. 110, (*C.*) *schildi* Costa Rica p. 111, *hoplites* Washington p. 115, **spp. n.** figs., SPULER Ann. Ent. Soc. Amer. **17.**

Limosina notatipennis, tenebrosa **spp. n.** Assam p. 103, BRUNETTI Rec. Ind. Mus. **26.**—*L.*, classification of subgenera *Trachyopella* & *Elachisoma* pp. 5–9, (*E.*) *rilosa* **sp. n.** Silesia p. 7 fig., DUDA Konowia **3.**—*L. melania* Rond. nec Hal. see *Trachyopella villeneuvii.*

Paracollinella **subgen. n.** see *Leptocera.*

Parasphaerocera **subgen. n.** see *Sphaerocera.*

Pseudocollinella **subgen. n.** see *Leptocera.*

Scotophilella denticulata p. 174, *pseudoleucoptera* p. 175 Germany, *kerteszi* Hungary p. 178, **spp. n.** fig., DUDA Verh. zool.-bot. Ges. Wien **73.**

Sphaerocera (*Parasphaerocera* **subgen. n.**) key to subgenera and species p. 68, (*Allosphaerocera*) *scabra* **sp. n.** Washington p. 68 fig., SPULER Pan-Pacific Ent. **1.**

Trachyopella villeneuvii **n. n.** for *Limosina melania* Rond. nec Hal. p. 164, DUDA Verh. zool.-bot. Ges. Wien **73.**—See *Limosina.*

HETERONEURIDAE.

Trigonometopus tinctipennis **sp. n.** Java p. 211, DE MEIJERE Tijd. Ent. **67.**

HELOMYZIDAE.

Amoebaleria perplexus **sp. n.** Br. Columbia p. 27, GARRETT Ins. Insc. Mens. **12.**

Anorostoma coloradensis Colorado p. 28, *jersei* New Jersey p. 29 **spp. n.**, GARRETT t.c.

Barbastoma barbatus ♀ described p. 33, GARRETT t.c.

Leria serrataria **sp. n.** Br. Columbia p. 26, GARRETT t.c.

Lutomyia distincta **sp. n.** Br. Columbia p. 30, GARRETT t.c.

Oecothea syriaca **sp. n.** Syria p. 8, VILLENEUVE Encyc. ent. Dipt. **1.**

Scoliocentra bipunctata **sp. n.** Germany p. 88 fig., MUELLER Verh. zool.-bot. Ges. Wien **73.**

Viatica **gen. n.** *spinosus* **sp. n.** California p. 32, GARRETT Ins. Insc. Mens. **12.**

SCIOMYZIDAE.

Ditaenia pallipes **sp. n.** Alsace p. 91, MUELLER Verh. zool.-bot. Ges. Wien **73.**

Renocera praetextata **sp. n.** seu **var. n.** France p. 92, MUELLER t.c.

Tetanocera, key to north Palaearctic species p. 49, *latifibula* Finland, Siberia, *borealis* Finland, Sweden, *ornatifrons* Finland, Siberia, *griseicollis* Siberia, *brunnipennis* Finland, *lapponica* Finland p. 51, *brevisetosa* Kamchatka p. 52 **spp. n.** fig., FREY Not. ent. **4.**

Tetanura fallenii **sp. n.** Vienna p. 206, HENDEL Konowia **2** 1923.

SAPROMYZIDAE

(including LAUXANIIDAE).

Key to genera of Sapromyzidae, MALLOCH & MCATEE Proc. U. S. Nat. Mus. **65** art. 12 p. 7 2 pls.

Lauxania pubiseta p. 47, *quadrangulata, limbifera* p. 48, *atratula* p. 49, *lunipennis, obscuriceps* p. 50, *angustata, talamaui* p. 51, *striatifrons* p. 52, **spp. n.** Sumatra, DE MEIJERE Tijd. Ent. **67** Suppl.

Minettia buchanani **sp. n.** Maryland p. 16, MALLOCH Proc. U. S. Nat. Mus. **65** art. 12.

Palloptera, key to N. American spp. p. 6, *claripennis, subusta* **spp. n.** California p. 7, MALLOCH Proc. U. S. Nat. Mus. **65** art. 12.

Sapromyza stictica Loew see *Trypetisoma.*

Sapromyzama nudifemur **sp. n.** Br. Columbia p. 24, MALLOCH t.c.

Sapromyzosoma deceptor New Hampshire **sp. n.** p. 24, MALLOCH t.c.

Steganopsis multilineata **sp. n.** Sumatra p. 53, DE MEIJÈRE Tijd. Ent. **67** Suppl.

Trypetisoma **gen. n.** for *Sapromyza stictica* Lw., MALLOCH Proc. U. S. Nat. Mus. **65** art. 12.

LONCHAEIDAE.

Key to N. American Lonchaeidae and list of spp. of District of Columbia, MALLOCH & MCATEE Proc. U. S. Nat. Mus. **65** art. 12 pp. 3, 5 1 pl.

Lonchaea chorea nephrocytes p. 219 figs., KEILIN Ann. Mag. N. H. (9) **13.**—*L. bicolaricornis* **sp. n.** India p. 404, SENIOR-WHITE Spol. Zeyl. **12.**

ORTALIDAE.

Notes on Platystominae, key p. 118, ENDERLEIN Mitt. zool. Mus. Berlin **11** pp. 97–153.

Key to genera of Phytalmyiinae, BEZZI Rev. zool. afr. **12** p. 228.

Acrosticta similis **sp. n.** Jamaica p. 238, CRESSON Trans. Amer. Ent. Soc. **50.**

Agrochira bismarckburgensis **sp. n.** Togo p. 151, ENDERLEIN Mitt. zool. Mus. Berlin **11.**

Brea ralumensis Bismarck Islands, *basalis* N. Guinea p. 129 **spp. n.**, ENDERLEIN t.c.

Chaestotichia [emended later to *Chaetostichia*] **gen. n.** (near *Pterogenia*) p. 133, *aduncivena* **sp. n.** Java ? p. 134, ENDERLEIN t.c.

Chaetopsis magna **sp. n.** Kansas p. 241, CRESSON Trans. Amer. Ent. Soc. **50.**

Clitodoca fenestralis **varr. n.** *unigutta* W. Africa p. 117, *nigripennis* Angola p. 118, ENDERLEIN Mitt. zool. Mus. Berlin **11.**—*C. fenestralis* **var. n.** *unifenestrata* p. 230, *schoutedeni* **sp. n.** p. 231, Belgian Congo figs., BEZZI Rev. zool. afr. **12.**

Duomyia fidschiensis **sp. n.** Fiji p. 112, ENDERLEIN Mitt. zool. Mus. Berlin **11.**

Elassogaster hilgendorfi **sp. n.** Japan p. 111, ENDERLEIN t.c.

Engistoneura catogastera **var. n.** *melanopleura* Togo, *obscura* **varr. n.** *duplicata, simplex* p. 139, *interrupta* p. 140 W. Africa, ENDERLEIN t.c.

Euxesta remota Havana p. 238, *magdalenae* New Mexico p. 240, **spp. n.**, CRESSON Trans. Amer. Ent. Soc. **50.**

Helocnemia **gen. n.**, type *apicalis* Walk. p. 128, ENDERLEIN Mitt. zool. Mus. Berlin **11.**

Hoploplatystoma **gen. n.**, type *leucolena* Speis. p. 150, ENDERLEIN t.c.

Illiothrix **gen. n.** (near *Stenopterina*) *trabeata* **sp. n.** Cuba p. 114, ENDERLEIN t.c.

Laglaisia stylops, telescopica **spp. n.** New Guinea p. 116, ENDERLEIN t.c.

Lamprogaster celebensis **sp. n.** Celebes p. 127, ENDERLEIN t.c.

Lamprophthalma anaulaca **var. n.** *sikkimensis, rhomalea* **var. n.** *violacea* N. India; *ochrifacies* p. 104, *togoensis* p. 105, **spp. n.** W. Africa, ENDERLEIN t.c.

Lepidocompsia **gen. n.**, type *impingens* Walk. p. 137, ENDERLEIN t.c.

Leptolabia **gen. n.** (near *Plagiostenopterina*) *gibbifrons* **sp. n.** Kamerun p. 109, ENDERLEIN t.c.

Liolamprogaster **gen. n.** (near *Lamprogaster*) *angusta* **sp. n.** Ternate p. 128, ENDERLEIN t.c.

Loxoneura melliana **sp. n.** China p. 118, ENDERLEIN t.c.

Lule stellata **sp. n.** W. Africa p. 99, ENDERLEIN t.c.

Lulodes **gen. n.** (near *Zygaenula*), *seriatopunctata* **sp. n.** Togo p. 135, ENDERLEIN t.c.

Meringomeria **gen. n.** (near *Plagiostenopterina*) type *trivittata* Walk. p. 108, *interrupta* **sp. n.** N. India p. 109, ENDERLEIN t.c.

Mesoctenia **gen. n.** (near *Zygaenula*) p. 130, *ralumensis* **sp. n.** Bismarck Islands p. 131, ENDERLEIN t.c.

Metoposparga **gen. n.** (near *Elassogaster*), *trilineata* **sp. n.** Burma p. 110, ENDERLEIN t.c.

Naupoda ypsilonoides **sp. n.** Sumatra p. 42, DE MEIJERE Tijd. Ent. **67** Suppl. —*N. camerunensis* p. 131 Kamerun, *metallica* p. 132 Madagascar, **spp. n.**, ENDERLEIN Mitt. zool. Mus. Berlin **11.**

Onceroparia **gen. n.** (near *Pterogenomyia* Hend.) *strigata* p. 100, *parviseta* p. 101, **spp. n.** W. Africa, ENDERLEIN t.c.

Oncoscelia **n. n.** for *Pachycepha* Dol. p. 136, *truncata* **sp. n.** Celebes p. 137, ENDERLEIN t.c.

Ortalis snowi **sp. n.** Kansas p. 234, CRESSON Trans. Amer. Ent. Soc. **50.**

Pachycepha Dol. see *Oncoscelia.*

Palpomyiella gagantina **sp. n.** E. Africa p. 151, ENDERLEIN Mitt. zool. Mus. Berlin **11.**

Parardelio voeltzkowi **sp. n.** Madagascar p. 126, ENDERLEIN t.c.

Parepicausta **gen. n.** (near *Pseudepicausta*) *togoënsis* **sp. n.** Togo p. 114, ENDERLEIN t.c.

Pariacis **gen. n.** (near *Engistoneura*) *honesta* **sp. n.** Kamerun p. 119, ENDERLEIN t.c.

Paryphodes alcuensis, compticeps p. 124, *flaviceps, globulata* p. 125, **spp. n.** W. Africa, ENDERLEIN t.c.

Peltacanthina seminigra p. 140, *tessmanni, albescens* p. 141, *venusta, trabeata* p. 142, *bracteata* p. 143 W. Africa, *faceta* p. 144, *annulifemur* E. Africa, *auricoma* W. Africa, *guttulata* E. Africa p. 145, *concinna, togoensis* W. Africa p. 146, *dispertita* E. Africa, *auristriata* p. 147, *trilineata* (**var. n.** *interrupta*), *albopilosa* p. 148, *lurida, kappa* W. Africa p. 149 **spp. n.**, ENDERLEIN t.c.

Peronotrochus **gen. n.** (near *Plagiostenopterina*) type *calcaratus* Macq. p. 109, ENDERLEIN t.c.

Phytalmodes africana **var. n.** *nigra* Belgian Congo p. 237 figs., BEZZI Rev. zool. afr. **12.**

Plagiostenopterina medionotata p. 40, *egregia* p. 41, **spp. n.** Sumatra, DE MEIJERE Tijd. Ent. **67** Suppl.—*P. submetallica* **var. n.** *minor* Togo; *nyassica* E. Africa, *nigripes* W. Africa p. 106, *ochripes* E. Africa, *friederichsi* Madagascar p. 107, *soror* Formosa, *angusta* N. India p. 108, **spp. n.**, ENDERLEIN Mitt. zool. Mus. Berlin **11.**

Plastotephritis seriata **sp. n.** Kamerun p. 153, ENDERLEIN t.c.

Prosthiochaeta **gen. n.** (near *Pterogenia*) *cyaneiventris* **sp. n.** Formosa p. 134, ENDERLEIN t.c.

Psairoptera similis Canada p. 236, *skinneri* Cuba p. 237, **spp. n.**, CRESSON Trans. Amer. Ent. Soc. **50**.

Pseudepicausta solocifemur **sp. n.** N. S. Wales p. 115, ENDERLEIN Mitt. zool. Mus. Berlin **11**.

Pterogenia rectivena Formosa p. 132, *bifasciata* Sumatra p. 133, **spp. n.**, ENDERLEIN t.c.

Rivellia vanderwulpi **sp. n.** Mexico p. 225, CRESSON Trans. Amer. Ent. Soc. **50**.

Scholastes carolinensis Caroline Is., *furcatifascia* Borneo p. 121, *trifasciatus* Ladrones p. 122, **spp. n.**, ENDERLEIN Mitt. zool. Mus. Berlin **11**.

Simomesia nigristigma, camerunensis, sexlineata **spp. n.** Kamerun p. 123, ENDERLEIN t.c.

Stenopterina verrucosa **varr. n.** *nigripes* Bolivia, *flavescens* Peru; *ochripennis* **sp. n.** Peru p. 113, ENDERLEIN t.c.

Tessmannella [altered later to *Tessmanniola*] **gen. n.**, *undulata* **sp. n.** Kamerun p. 152, ENDERLEIN t.c.

Tetanops magdalenae **sp. n.** N. Mexico p. 233, CRESSON Trans. Amer. Ent. Soc. **50**.

Tetrachaetina **gen. n.** (near *Euprosopia*) *bürgersiana* **sp. n.** New Guinea p. 138, ENDERLEIN Mitt. zool. Mus. Berlin **11**.

Xenaspis polistiformis **sp. n.** (with **varr. n.** *nigripilosa, flavipilosa*) p. 102 N. India, *flavipes* [sic] p. 102 Formosa, *pedunculata, sikkimensis* p. 103 N. India **spp. n.**, ENDERLEIN t.c.

Xiria limbata **sp. n.** Sumatra p. 40, DE MEIJERE Tijd. Ent. **67** Suppl.

TRYPETIDAE.

The Ethiopian fruit-flies with keys to all the genera and species, BEZZI Bull. Ent. Res. **15** pp. 73–118, 121–155.

Revision of South African Trypetidae, BEZZI Ann. S. Afr. Mus. **19** pp. 449–577 figs.

Catalogue of Indian Insects. Part 4 Trypetidae, SENIOR-WHITE Calcutta 1924 33 pp.

Acanthiophilus key, *muiri* **sp. n.** Durban p. 139, BEZZI Bull. Ent. Res. **15**.

Acidia parallela **sp. n.** Sumatra p. 38 fig., DE MEIJERE Tijd. Ent. **67** Suppl.

Aciura tetrachaeta **var. n.** *haematopoda* p. 512; *nigriseta* **sp. n.** p. 513 S. Africa fig., BEZZI Ann. S. Afr. Mus. **19**.—*A. grandidieri* **sp. n.** Madagascar p. 88, BEZZI Bull. Mus. Hist. nat. Paris **1924**.—*A.*, key to Ethiopian p. 121, *basimacula* **sp. n.** Laccadive Is. p. 123, BEZZI Bull. Ent. Res. **15**.

Acroceratitis nigrifacies **sp. n.** Sumatra p. 36 fig., DE MEIJERE Tijd. Ent. **67** Suppl.

Afreutreta key, *biseriata* **sp. n.** Rhodesia p. 128, BEZZI Bull. Ent. Res. **15**.—*A. discoidalis* **sp. n.** S. Africa p. 528 fig., BEZZI Ann. S. Afr. Mus. **19**.

Afrocneros **gen. n.** type *Ocneros excellens* p. 112, BEZZI Bull. Ent. Res. **15**.—*A.*, key p. 489, *mundissimus* **sp. n.** S. Africa p. 490 figs., BEZZI Ann. S. Afr. Mus. **19**.

Afrodacus **gen. n.** for *Chaetodacus biguttulus* Bezzi, S. Africa p. 469 fig., BEZZI Ann. S. Afr. Mus. **19**.

Allotrypes gracilis LW. (= *brevicornis* Bezzi) p. 502, BEZZI Ann. S. Afr. Mus. **19**.

Bactropota **gen. n.** p. 153, *woodi* **sp. n.** Nyasaland p. 154, BEZZI Bull. Ent. Res. **15**.

Baryglossa bequaerti **sp. n.** Congo p. 14, BEZZI Rev. zool. afr. **12**.

Brachyaciura **gen. n.** p. 121, BEZZI Bull. Ent. Res. **15**.

Carpophthoromyia key p. 95, *woodi* **sp. n.** Nyasaland p. 96, BEZZI Bull. Ent. Res. **15**.—*C. dimidiata* **sp. n.** Natal p. 474 fig., BEZZI Ann. S. Afr. Mus. **19**.—*C. cinereofasciata* **sp. n.** Sumatra p. 37 fig., DE MEIJERE Tijd. Ent. **67** Suppl.

Celidodacus fenestratus **var. n.** *oculatus* Congo p. 13, BEZZI Rev. zool. afr. **12**.

Ceratitis capitata Wied. (= *Pardalaspis asparagi* Bezzi) p. 155, BEZZI Bull. Ent. Res. **15**.

Chaetodacus biguttulus Bezzi see *Afrodacus.*

Chelyophora key, *woodi* **sp. n.** Nyasaland p. 98, Bezzi Bull. Ent. Res. **15.**

Coelotrypes **gen. n.** p. 494, *vittatus* **sp. n.** S. Africa p. 495 fig., Bezzi Ann. S. Afr. Mus. **19.**—*C.*, key p. 113, *pallidus* Mozambique, *nigriventris* Sudan p. 114 **spp. n.**, Bezzi Bull. Ent. Res. **15.**

Colobostrella biangulata p. 34, *flavomaculata* p. 35, **spp. n.** Sumatra fig., de Meijere Tijd. Ent. **67** Suppl.

Craspedoxantha marginalis **var. n.** *unimaculata*; *polyspila* **sp. n.** S. Africa p. 505 fig., Bezzi Ann. S. Afr. Mus. **19.**

Dacus, key p. 85, *marshalli* S.Rhodesia p. 89, *elutissimus* W. Africa p. 90 **spp. n.**, Bezzi Bull. Ent. Res. **15.**—*D. aspilus* p. 10, *mayněi* p. 11, **spp. n.**, Congo, Bezzi Rev. zool. afr. **12.**—*D.*, key p. 458, *fuscatus* **var. n.** *subfuscatus* p. 460, *rubicundus* p. 463, *purpurifrons* p. 464, *apoxanthus* p. 466 (with **var. n.** *decolor*), *bigemmatus* p. 467, *asclepiadens* p. 468 **spp. n.**, *woodi* **var. n.** *xanthopus* p. 464 S. Africa figs., Bezzi Ann. S. Afr. Mus. **19.**

Ensina cribripennis **sp. n.** S. Africa p. 90, Bezzi Bull. Mus. Hist. nat. Paris **1924.**—*E. barnardi* p. 547, *liliputiana*, *hyalipennis* p. 549, *hieroglyphica* p. 552 **spp. n.**; *anceps* **var. n.** *fasciolata* p. 550, *ignobilis* **var. n.** *plebeja* p. 551 S. Africa figs., Bezzi Ann. S. Afr. Mus. **19.**

Euaresta lunifrons **sp. n.** S. Africa p. 530 fig., Bezzi Ann. S. Afr. Mus. **19.**—*E. iphionae* **sp. n.** Egypt p. 153, Efflatoun Bull. Soc. R. ent. Egypte **1923** 1924.

Euribia tuckeri p. 553, *peringueyi* p. 555, *lightfooti* p. 556, **spp. n.** S. Africa figs., Bezzi Ann. S. Afr. Mus. **19.**

Eutretosoma key p. 148, *woodi* Nyasaland p. 149, *marshalli* Rhodesia p. 150, **spp. n.**, Bezzi Bull. Ent. Res. **15.**

Hermannloewia **gen. n.** for *Trypeta jucunda* Loew p. 496, *dissoluta* **sp. n.** S. Africa p. 498 fig., Bezzi Ann. S. Afr. Mus. **19.**

Munroella **gen. n.** p. 510, *myiopitina* **sp. n.** p. 511 S. Africa fig., Bezzi t.c.

Ocnerioxa interrupta **sp. n.** S. Africa p. 491 figs., Bezzi t.c.

Ocneros excellens see *Afrocneros.*

Oedoncus Speis. (= *Rhynchoedaspis* Bezzi), *taenipalpis* Speis. (= R. *munroana* Bezzi) p. 121 (note), Bezzi Bull. Ent. Res. **15.**

Pardalaspis key to S. African p. 479, *asparagi*, *pedestris* **spp. n.** S. Africa p. 480 figs., Bezzi Ann. S. Afr. Mus. **19.** —*P.*, key p. 100, *giffardi* **var. n.** *sarcocephali* S. Nigeria p. 103, *bipustula* **sp. n.** Nyasaland p. 104, Bezzi Bull. Ent. Res. **15.**—*P. asparagi* see *Ceratitis capitata.*

Perilampsis diademata **sp. n.** S. Africa p. 482 figs., Bezzi Ann. S. Afr. Mus. **19.**

Phorellia peringueyi **sp. n.** S. Africa p. 488 fig., Bezzi t.c.

Platomma **gen. n.** for *Trypeta lunifera* Loew p. 526 fig., Bezzi t.c.

Pliomelaena key p. 129, *brevifrons* **var. n.** *aspila*, *caeca* p. 130, *woodi* p. 131 **spp. n.** Nyasaland, Bezzi Bull. Ent. Res. **15.**—*P. brevifrons* **var. n.** *rufiventris* p. 532, *stigmatica* **sp. n.** p. 533 S. Africa figs., Bezzi Ann. S. Afr. Mus. **19.**

Pterandrus key, *pauper* **sp. n.** Gold Coast p. 99, Bezzi Bull. Ent. Res. **15.**—*P. podocarpi* p. 476, *cornutus* p. 478 **spp. n.** S. Africa figs., Bezzi Ann. S. Afr. Mus. **19.**

Rhabdochaeta key, *nigra* Nyasaland p. 151, *marshalli* Rhodesia p. 152, **spp. n.**, Bezzi Bull. Ent. Res. **15.**

Rhacochlaena key p. 109, *major* Rhodesia, *simplex* Nyasaland p. 110 **spp. n.**, Bezzi Bull. Ent. Res. **15.**

Rhagoletis symphoricarpi **sp. n.** Br. Columbia p. 63, Curran Can. Ent. **56.** —*R. pomonella*, *symphoricarpi*, *zephyria*, characters distinguishing p. 57 fig., Curran 54th Ann. Rept. Ent. Soc. Ontario **1923.**—*R. pomonella* anatomy & metamorphosis pp. 1–36 fig., Snodgrass J. Agric. Res. **28.**

Rhochmopterum key, *lutescens* Uganda p. 153 **sp. n.**, Bezzi Bull. Ent. Res. **15.** —*R. munroi* **sp. n.** S. Africa p. 523 fig., Bezzi Ann. S. Afr. Mus. **19.**

Rhynchoedaspis **gen. n.** p. 508, *munroana* **sp. n.** S. Africa p. 509 fig., Bezzi Ann. S. Afr. Mus. **19**—See *Oedoncus.*

Rivelliomima **gen. n.** p. 502, *punctiventris* **sp. n.** S. Africa p. 503 fig., Bezzi Ann. S. Afr. Mus. **19.**

Spathulina semiatra **var. n.** *semirufa*; *munroi* (with **var. n.** *majuscula*) p. 535, *anomalina* p. 536, *peringueyi* p. 538, *biseuarestina* p. 539, *arcucincta* p. 540, *elegantula* (with **var. n.** *diminuta*) p. 541 **spp. n.**, *hessii* **varr. n.** *simplex*, *euarestina* p. 543 S. Africa figs., BEZZI t.c.

Sphenella nigricornis **sp. n.** S. Africa p. 544, BEZZI t.c.

Spheniscomyia compacta p. 515, *quaternaria* p. 516, *quinaria* p. 517 **spp. n.** S. Africa figs., BEZZI t.c.—*S. debskii* p. 133, *aegyptiaca* p. 137, **spp. n.** Egypt, EFFLATOUN Bull. Soc. R. ent. Egypte **1923** 1924.

Staurella maculifemur **sp. n.** Sumatra p. 39 fig., DE MEIJERE Tijd. Ent. **67** Suppl.

Tephrella dispar p. 518, *distigma* p. 519, **spp. n.** S. Africa figs., BEZZI Ann. S. Afr. Mus. **19.**

Tephritis montana **sp. n.** Java p. 223 fig., DE MEIJERE Tijd. Ent. **67.**

Terellia taeniaptera **sp. n.** p. 506, *planiscutellata* **var. n.** *australis* p. 508 S. Africa figs., BEZZI Ann. S. Afr. Mus. **19.**

Tridacus key p. 452, *chrysomphalus* p. 453, *lotus* p. 455, *sphaerostigma* p. 457, **spp. n.** S. Africa figs., BEZZI Ann. S. Afr. Mus. **19.**—*T. eclipsis* Durban p. 83, *telfaireae* Tanganyika p. 84, **spp. n.**, BEZZI Bull. Ent. Res. **15.**

Trirhithrum key p. 105, *basale* **sp. n.** Nyasaland p. 107, BEZZI Bull. Ent. Res. **15.**—*T.*, key p. 483, *lycii* **var. n.** *minimum* S. Africa p. 484, BEZZI Ann. S. Afr. Mus. **19.**

Trypanea key p. 140, *brachystigma* p. 143, *aurea* p. 144 Nyasaland, *kingi* Br. Sudan p. 145, *woodi* p. 146, *bisdiversa* p. 147 Nyasaland, **spp. n.**, BEZZI Bull. Ent. Res. **15.**—*T. rivularis* p. 561, *bulligera* (with **var. n.** *bullosa*) p. 563, *euarestina* p. 564, *dentiens* p. 565, *lutescens* p. 567, *pulchella* p. 568, *mutila* p. 569, *superdecora* p. 570, *bisreducta* p. 571, *peregrina* **var. n.** *mundella* p. 562; *woodi* **var. n.** *arrhiza*; *subcompleta* **var. n.** *furcatella* p. 568; *peregrina* Adams (= *urophora* Bezzi) p. 562? S. Africa figs., BEZZI Ann. S. Afr. Mus. **19.**

Trypanophion **gen. n.** p. 91, *gigas* **sp. n.** Uganda p. 92, BEZZI Bull. Ent. Res. **15.**

Trypeta jucunda see *Hermannloewia.* —*T. lunifera* Lw. see *Platomma.*

Urophora key, *agromyzella* **sp. n.** Nyasaland p. 116, BEZZI Bull. Ent. Res. **15.**

Xanthanomoea **gen. n.** p. 492, *munroi* **sp. n.** S. Africa p. 493 fig., BEZZI Ann. S. Afr. Mus. **19.**

Zacerata **gen. n.** *asparagi* **sp. n.** p. 64, S. Africa, COQUILLETT Proc. Ent. Soc. Wash. **26.**—*Z.*, described p. 498, *taomyioides* **sp. n.** S. Africa p. 500 fig., BEZZI Ann. S. Afr. Mus. **19.**

SEPSIDAE.

Arctopiophila see *Piophila.*

Allopiophila see *Piophila.*

Lasiopiophila **subgen. n.** see *Piophila.*

Liopiophila **subgen. n.** see *Piophila.*

Lycosepsis metatarsata **sp. n.** Sumatra p. 33, DE MEIJERE Tijd. Ent. **67** Suppl.

Mycetaulus key p. 78, *costalis*, *nigritellus* p. 79, *polypori* p. 80, *testaceus*, *brevicornis* p. 81, **spp. n.** U.S.A., MELANDER Psyche **31.**

Piophila, revision of some European, Greenland and south-east Asiatic species pp. 97–113, 153–203; **subgen. n.** *Lasiopiophila* for *pilosa* Staeger p. 109; **subgen. n.** *Liopiophila* p. 109, *lundbecki* **sp. n.** Iceland, *varipes* **var. n.** *oldenbergi*, *nigrimana* **var. n.** *nigrohaltera* Europe p. 111; **subgen. n.** *Arctopiophila* for *nigerrima* Lundb. p. 109; **subgen. n.** *Protopiophila* for *latipes* Meig. p. 109; *Allopiophila* Hendel a subgenus p. 109, *pectiniventris* **n. n.** for *foveolata* Rond., p. 172, *calceata* **sp. n.** Sweden p. 174, *staegeri* **sp. n.** p. 176, DUDA Konowia **3.** —*P.*, key to N. American subgenera and species p. 83, *morator* p. 85, *privigna* p. 86, **spp. n.** U.S.A., MELANDER Psyche **31.**

Prochyliza winthemi **sp. n.** America ? p. 193, DUDA Konowia **3.**

Protopiophila **subgen. n.** see *Piophila.*

Sepsis inglisi **sp. n.** India p. 403 fig., SENIOR-WHITE Spol. Zeyl. **12.**

MICROPEZIDAE.

Calobata talamaui, nigrocincta p. 25, *niveicoxa* p. 26, *rufithorax* p. 27, **spp. n.** Sumatra, DE MEIJERE Tijd. Ent. **67** Suppl.

Cliopeza armipennis **sp. n.** Brazil p. 73 fig., BEZZI Encyc. ent. Dipt. **1.**

Eurybata quadriseta **sp. n.** Sumatra p. 29, DE MEIJERE. Tijd. Ent. **67** Suppl.

Nothybus decorus **sp. n.** Sumatra p. 30 fig., DE MEIJERE t.c.

Paranerius (*Protonerius* **subgen. n.**) *guttipennis* **sp. n.** Sumatra p. 28, DE MEIJERE t.c.

Protonerius **subgen. n.** see *Paranerius.*

Scipopus raptimanus **sp. n.** Brazil p. 75 fig., BEZZI Encyc. ent. Dipt. **1.**

Telostylinus humeralis **sp. n.** Sumatra p. 29, DE MEIJERE Tijd. Ent. **67** Suppl.

Texara compressa Wlk. ♂ redescribed p. 31, *luteinervis* **sp. n.** Sumatra p. 32, DE MEIJERE t.c.

CHLOROPIDAE.

Aprometopis orientalis **sp. n.** Formosa p. 124, BECKER Ent. Mitt. **13.**

Assuania tubifera see *Cordylosoma.*

Caviceps **gen. n.** p. 355, *flavipes* **sp. n.** p. 356 Australia fig., MALLOCH Proc. Linn. Soc. N.S.W. **49.**

Chloromeris key to Australian, type *purus* Becker p. 332, MALLOCH t.c.

Chloropisca notata biology pp. 25–28, ZÜRCHER Schweizer ent. Anz. **3.**

Chlorops lenis p. 117, *longicollis* p. 118, **spp. n.** Formosa, BECKER Ent. Mitt. **13.**

Chloropsina nigrohalterata **sp. n.** Australia p. 333, MALLOCH Proc. Linn. Soc. N.S.W. **49.**

Cordylosoma **gen. n.** for *Assuania tubifera* p. 119, BECKER Ent. Mitt. **13.**

Deltastoma **gen. n.** *unipunctata* **sp. n.** Australia p. 359 figs., MALLOCH Proc. Linn. Soc. N.S.W. **49.**

Doliomyia **subgen. n.** see *Melanochaeta.*

Elachiptera umbrosa **sp. n.** Formosa p. 120, BECKER Ent. Mitt. **13.**

Ephydroscinis **gen. n.** *australis* **sp. n.** Australia p. 321 figs., MALLOCH Proc. Linn. Soc. N.S.W. **49.**

Formosina nigrolimbata **sp. n.** Sumatra p. 43, DE MEIJERE Tijd. Ent. **67** Suppl.

Gaurax atriseta **sp. n.** Australia p. 355, MALLOCH Proc. Linn. Soc. N.S.W. **49.**

Melanochaeta (*Doliomyia* **subgen. n.**) *longiventris* **sp. n.** Ithaca p. 89, JOHANNSEN Can. Ent. **56.**

Meroscinis albicapilla p. 43, *nigrovenosa* p. 44, **spp. n.** Sumatra, DE MEIJERE Tijd. Ent. **67** Suppl.

Oscinella pumila, dispar p. 121, *subnitens, glabrina* p. 122, *perspicienda* p. 123, **spp. n.** Formosa, BECKER Ent. Mitt. **13.**—*O. frit* prevalence and habits pp. 54–72 3 charts, CUNLIFFE Ann. App. Biol. **11.**

Parahippelates costomaculata p. 329, *albiseta, fuscipes* p. 330, **spp. n.** Australia, MALLOCH Proc. Linn. Soc. N.S.W. **49.**

Siphunculina breviseta **sp. n.** Australia p. 358, MALLOCH t.c.

Steleocerus pallidior **sp. n.** Formosa p. 119, BECKER Ent. Mitt. **13.**

Tachinoceras **gen. n.** (near *Meroscinis*) *longicornis* **sp. n.** Sumatra p. 45 fig., DE MEIJERE Tijd. Ent. **67** Suppl.

Teleocoma **gen. n.** *crassipes* **sp. n.** Brazil p. 1, ALDRICH Proc. U. S. Nat. Mus. **65** art. 21.

Thyridula atroapicata **sp. n.** Australia p. 358 figs., MALLOCH Proc. Linn. Soc. N.S.W. **49.**

Tricimba carinata **sp. n.** Australia p. 356, MALLOCH t.c.

DIOPSIDAE.

Diasemopsis varians p. 27, *silvatica* p. 28, *incerta* p. 29, *pulchella* p. 30, **spp. n.** fig. B. E. Africa, EGGERS in DOGIEL & SOKOLOW Sci. Results Zool. Exped. B. E. Afr. & Uganda in 1914 **1** 1916 no. 6.

Diopsis finitima **sp. n.** fig. B. E. Africa p. 22, EGGERS t.c.

MILICHIIDAE.

Phyllomyza tenebrosa **sp. n.** Assam p. 104, BRUNETTI Rec. Ind. Mus. **26.**—*P.*, key to European, *rubricornis* p. 44 Budapest, *formicae* p. 46, *donisthorpei* p. 47 England, **spp. n.**, SCHMITZ Konowia **2** 1923.

EPHYDRIDAE.

Actocetor formosinus **sp. n.** Formosa p. 90, BECKER Ent. Mitt. **13.**

Brachydeutra sydneyensis **sp. n.** Australia p. 335, MALLOCH Proc. Linn. Soc. N.S.W. **49.**

Canacea macateei **sp. n.** Georgia p. 52, MALLOCH Proc. Ent. Soc. Wash. **26.**

Discocerina infantina, pernigra **spp. n.** Formosa p. 93, BECKER Ent. Mitt. **13.**—*D. xanthocera, nana, aliena* see *Ditrichophora.*—*D. orbitalis* see *Polytrichophora.*

Ditrichophora **gen. n.** (near *Discocerina*) *exigua* p. 159, *tacoma, parilis* p. 160, **spp. n.** U.S.A., CRESSON Ent. News **35.**

Hydrellia morrisoni, notiphiloides **spp. n.** U.S.A. p. 162, CRESSON Ent. News **35.**—*H. griseola* notes p. 172, WILKE D. ent. Zs. **1924.**

Lytogaster extera **sp. n.** U.S.A. p. 162, CRESSON Ent. News **35.**

Napaea (*Parhydra*) *inornata* **sp. n.** Formosa p. 92, BECKER Ent. Mitt. **13.**—*N. alpina* **sp. n.** U.S.A. p. 163, CRESSON Ent. News **35.**

Polytrichophora **gen. n.** (near *Discocerina*) *agens, conciliata* **spp. n.** U.S.A. p. 161, CRESSON t.c.

Psilopa sorella, gilvipes, incerta p. 91, *bella* p. 92, **spp. n.** Formosa, BECKER Ent. Mitt. **13.**

Rhysophora **gen. n.** (near *Discocerina*) *robusta* **sp. n.** E. United States p. 159, CRESSON Ent. News **35.**

Xanthocanace nigrifrons **sp. n.** Australia p. 334 figs., MALLOCH Proc. Linn. Soc. N.S.W. **49.**

DROSOPHILIDAE.

Key to genera of Palaearctic and Eastern Drosophilidae, DUDA Arch. Natg. **90** A 3 p. 176.

Keys to genera and spp. of N. American Drosophilidae, MALLOCH & MCATEE Proc. Biol. Soc. Wash. **37** p. 25.

Acletoxenus meijerei **sp. n.** Java p. 224, DUDA Arch. Natg. **90** A 3.

Acrodrosophila **subgen. n.** see *Drosophila.*

Amiota setigera **sp. n.** Illinois p. 5, MALLOCH Bull. Brooklyn Ent. Soc. **19.**

Cacoxenus punctatus Formosa, *exiguus* Europe **spp. n.** p. 225 fig., DUDA Arch. Natg. **90** A 3.

Chymomyza cinctifrons **sp. n.** Sumatra p. 47, DE MEIJERE Tijd. Ent. **67** Suppl.

Clastopteromyia **gen. n.** type *Drosophila inversa* Walk. p. 31, MALLOCH & MCATEE Proc. Biol. Soc. Wash. **37.**—*C. floridana* Florida, *triseta* Costa Rica, **spp. n.** p. 10, MALLOCH Proc. U.S. Nat. Mus. **66** art. 3.

Diathoneura **gen. n.** Costa Rica (without species) p. 180, DUDA Arch. Natg. **90** A 3.

Drosophila, revision of European p. 246, key to European p. 248, *miki* p. 274, *pleurofasciata* p. 276, *schmidti* p. 273, (*Hirtodrosophila*) *oldenbergi* p. 265, *kuntzei* p. 288, *pokornyi* p. 290, *deflexa* p. 304, *lugubrina* p. 311 **spp. n.** Europe, *vibrissima* **n. n.** for *histrio* Oldenb. p. 297, DUDA Ent. Medd. **14.**—Key to subgenera, *Incisurifrons* **subgen. n.** type *congesta* Zett. (=*frontata* de Meij.); *Spinodrosophila* **subgen. n.** type *nigrosparsa* Strobl p. 202; *Parascaptomyza* **subgen. n.** = *Scaptomyza* Hardy p. parte; *Scaptomyza* **subgen. n.** =*Scaptomyza* Hardy s. str. p. 203, *quadriseriata* Java p. 211 *Hirtodrosophila* **subgen. n.** p. 203; *astioidea* Formosa, N. Guinea, *oldenbergi* Austria-Hungary p. 204; *Acrodrosophila* **subgen. n.** type *testacea* v. Roser (=*putrida* Sturt.); *Pugiodrosophila* **subgen. n.** type *pugionota* de Meij. p. 203; *Paradrosophila* **subgen. n.** p. 205, *guinensis,* N. Guinea pp. 209, *scutellimargo* p. 206, *subaculicornis* p. 207, *marginata* p. 209 Formosa **spp. n.**; *Spinulophila* **subgen. n.** p. 203, *annulipes* pp. 209, 242, *albomicans* Formosa pp. 209, 245, *unipectinata* pp. 215, 246, *tristipennis* pp. 215, 247, *lividipennis* p. 216 Formosa **spp. n.**, *xanthogaster* (=*hypocausta* de Meij.) pp. 217, 248, *paravibrissina* pp. 218, 248, *singularis* pp. 220, 249, Formosa, *fruhstorferi* Darjeeling p. 211, *schmidti, miki, pleurofasciata* p. 213, *kuntzei, pokornyi* p. 218, *deflexa* p. 222, *lugubrina* p. 224 Europe, *albolimbata* p. 216, *baseogrisea* p. 221, *ochrifrons* p. 223 Sumatra, *dorsata* pp. 220, 248 Formosa, Annam, *tristipes* Batavia p. 220 **spp. n.** figs.,

longecrinita **sp. n.** (with **var. n.** *curvinervis*) Formosa, N. Guinea pp. 204, 242, *montium* **varr. n.** *xanthopyga, atropyga* Java, Formosa, Annam p. 215, *vibrissina* **n. n.** for *histrio* Oldenb. p. 219, (*Paradrosophila*) *scutellimargo* p. 243, *subacuticornis, marginata* p. 244, Formosa, DUDA Arch. Natg. **90** A 3.—*D. mycetophaga, polypori, setifemur* p. 351, *nigrovittata, albostriata* p. 352, *fuscithorax* p. 353, *flavohirta* p. 354, **spp. n.** Australia, MALLOCH Proc. Linn. Soc. N.S.W. **49.**—*D. schildi* **sp. n.** Costa Rica p. 10, MALLOCH Proc. U. S. Nat. Mus. **66** art. 3.—*D. biarmipes* **sp. n.** Coimbatore p. 64, MALLOCH Mem. Dept. Agric. India **8.**—*D. deflecta, lativittata* **spp. n.** (Malloch) N. America p. 36 fig., MALLOCH & MCATEE Proc. Biol. Soc. Wash. **37.**—*D.* (*Leucophenga*) *argentina* **sp. n.** Sumatra p. 46, DE MEIJERE Tijd. Ent. **67** Suppl.—*D.*, eye structure p. 337 figs., JOHANNSEN J. Morph. **39.**—*D. melanogaster*, maturation and fertilization pp. 249–259 figs., HUETTNER J. Morph. **39**; compound eye p. 143, KRAFKA Biol. Bull. Wood's Hole **47.**—*D. inversa*, Walk. see *Clastopteromyia.*

Drosophilella **gen. n.** *colocasiae* **sp. n.** Java pp. 178 and 253, fig., DUDA Arch. Natg. **90** A 3.

Gitona distans **sp. n.** Cyprus p. 254 figs., BEZZI Ann. Mag. N. H. (9) **14.**—*G. beckeri* **sp. n.** Turkestan p. 226 fig., DUDA Arch. Natg. **90** A 3.

Hirtodrosophila **subgen. n.** see *Drosophila.*

Incisurifrons **subgen. n.** see *Drosophila.*

Leucophenga key, (*Parahinoleucophenga* **subgen. n.** type *maura* de Meij.), (*Trichiaspiphenga* **subgen. n.** type *invicta* Walk.) p. 185, *nigrinervis* pp. 186, 236, *nigroscutellata* pp. 186, 237, *interrupta* pp. 187, 237, *umbratula* pp. 187, 238, *halteropunctata* pp. 188, 239, *subacutipennis* pp. 189, 239, *meijerea, confluens* p. 190, **spp. n.** Formosa figs., DUDA Arch. Natg. **90** A 3.—*L. brazilensis* **sp. n.** Brazil p. 9, MALLOCH Proc. U.S. Nat. Mus. **66** art. 3.—*L. conjuncta* **sp. n.** Australia p. 350, MALLOCH Proc. Linn. Soc. N.S.W. **49.**

Mycodrosophila key p. 192, DUDA Arch. Natg. **90** A 3.

Neorhinoleucophenga **gen. n.** Costa Rica (without species) p. 179, DUDA t.c.

Oxyphortica **subgen. n.** see *Phortica.*

Oxystyloptera **gen. n.** type *tectifrons* de Meij. Java p. 192 fig., DUDA t.c.

Paradrosophila **subgen. n.** see *Drosophila.*

Parahinoleucophenga **subgen. n.** see *Leucophenga.*

Paramycodrosophila **gen. n.** type *pictula* de Meij. Batavia, Formosa p. 191 fig., DUDA t.c.

Parapsinota **gen. n.** type *angustipennis* de Meij. p. 177 fig., DUDA t.c.

Parascaptomyza **subgen. n.** see *Drosophila.*

Phortica (*Oxyphortica* **subgen. n.** type *convergens* de Meij. p. 182), key p. 183, *parallelinervis* Java pp. 183, 251, *oldenbergi* Europe p. 183, **spp. n.** figs., DUDA t.c.

Phorticella **gen. n.** p. 179 type *fenestrata* de Meij. Java p. 182 fig., DUDA t.c.

Pictostyloptera **gen. n.** type *preciosa* de Meij. Java p. 192 fig., DUDA t.c.

Protostegana key p. 184, DUDA t.c.

Pugiodrosophila **subgen. n.** see *Drosophila.*

Scaptodrosophila **gen. n.** p. 180, *divergens* pp. 190, 240 Formosa, *quadriradiata* N. Guinea, Java p. 208 **spp. n.** fig., DUDA t.c.

Scaptomyza nigripalpis, fuscinervis **spp. n.** Brazil p. 11, MALLOCH Proc. U.S. Nat. Mus. **66** art. 3.

Spinodrosophila **subgen. n.** see *Drosophila.*

Spinulophila **subgen. n.** see *Drosophila.*

Spuriostyloptera **gen. n.** p. 191, DUDA Arch. Natg. **90** A 3.

Stegana key, *nigrolimbata* Formosa, *mehadiae* Europe p. 181, **spp. n.**, DUDA t.c.—*S. interrupta* Costa Rica p. 2, *cristimana* p. 8, *nigrimana* p. 9 Panama **spp. n.**, MALLOCH Proc. U.S. Nat. Mus. **66** art. 3.—*S.*, key to American spp. pp. 96–100, MALLOCH Ent. News **35.**

Styloptera **gen. n.** key p. 193, *formosae* Formosa, *fruhstorferi* Annam **spp. n.** p. 194 fig., DUDA Arch. Natg. **90** A 3.

Tanygastrella **gen. n.** *gracilis* Java pp. 192, 253, *hypopygialis* Sumatra, **spp. n.** pp. 192, 254, DUDA t.c.

Trichiaspiphenga **subgen. n.** see *Leucophenga.*

ASTEIIDAE.

Leiomyza nitidula **sp. n.** Australia p. 338, MALLOCH Proc. Linn. Soc. N.S.W. **49.**

GEOMYZIDAE.

Geomyza sabulosa wing muscles p. 221, MERCIER C.R. Acad. Sci. **179.**

AGROMYZIDAE.

List of Dutch Agromyzinae, DE MEIJERE Tijd. Ent. **67** p. 119.

Agromyza revision, many new names, p. 145, HENDEL Konowia **2** 1923.—*A. johannae* **sp. n.** Holland p. 130, DE MEIJERE Tijd. Ent. **67.**—*A. humuli* **sp. n.** Germany p. 235, HERING Zs. Morph. Oekol. **2.**—*A. reverberata, holti,* p. 191, *pallidiseta* **spp. n.** U.S.A., *nasuta* Melander (=*youngi* Mall. = *madizina* Hendel), *angulicornis* Mall. (=*angularis* Hendel) p. 192, MALLOCH Can. Ent. **56.**—*A. urticae* **sp. n.** N. Zealand p. 685 fig., WATT Trans. N.Z. Inst. **55.**

Dizygomyza mallochi **sp. n.** Switzerland p. 147, HENDEL Konowia **3.**—*D. hendeli* **sp. n.** Holland p. 138, DE MEIJERE Tijd. Ent. **67.**

†*Eomyza* **gen. n.** p. 200, *holoptera* **sp. n.** Green River Eocene, Colorado p. 201, COCKERELL Entomologist **57.**

Fergusonina **gen. n.** p. 337, *microcera* **sp. n.** Australia p. 338 fig., MALLOCH Proc. Linn. Soc. N.S.W. **49.**

Haplomyza chenopodii **sp. n.** N. Zealand p. 683 fig., WATT Trans. N.Z. Inst. **55.**

Hypaspistomyia albipennis **sp. n.** Australia p. 336, MALLOCH Proc. Linn. Soc. N.S.W. **49.**

Leucopis (*Neoleucopis*) *luteicornis* **sp. n.** Coimbatore p. 67, MALLOCH Mem. Dept. Agric. India **8.**

Liriomyza graminicola, equiseti, leguminosarum p. 141, *artemisicola* p. 142, **spp. n.** Holland, DE MEIJERE Tijd. Ent. **67.**—*L. thesii* **sp. n.** Germany p. 234, HERING Zs. Morph. Oekol. Tiere **2.**

Melanagromyza sarothamni p. 143, *pubescens* p. 144, *beckeri, euphorbiae* p. 145 **spp. n.** Austria, *pulicaria* Meig. (=*olgae* Her.) p. 143, HENDEL Konowia **2** 1923.—*M. pulicaria* Mg. (=*olgae* Her.) p. 250, HERING Zs. Morph. Oekol. **2.**

Napomyza salviae **sp. n.** Hungary p. 40, HERING Zs. wiss. Insektenbiol. **19.**

Odinia williamsi **sp. n.** Galapagos p. 90, JOHNSON Zoologica **5.**

Ophiomyia melandryi **sp. n.** Holland p. 137, DE MEIJERE Tijd. Ent. **67.**

Phytagromyza lucens **sp. n.** Holland p. 142, DE MEIJERE Tijd. Ent. **67.**

Tethina nigriseta **sp. n.** Australia p. 337, MALLOCH Proc. Linn. Soc. N.S.W. **49.**

PHYTOMYZIDAE.

Phytomyza periclymeni p. 145, *trifolii* p. 148, *jacobaeae* p. 152, **spp. n.** Holland, DE MEIJERE Tijd. Ent. **67.**—*P.*, key p. 143, *laserpitii, pimpinellae* p. 140, *rectae* p. 141, *astrantiae, carvifoliae* p. 145, *aconiti* p. 146, **spp. n.** Austria, HENDEL Konowia **3.**—*P. loewii* **n. n.** for *clematidis* Loew nec Kalt. p. 145, HENDEL Konowia **2** 1923.—*P. saxifragae* p. 38, *centaureae, petoï, doronici* p. 39, *sedicola* p. 40, **spp. n.** Hungary, HERING Zs. wiss. Insektenbiol. **19.**—*P. calthae* p. 221, *pulsatillae* p. 223, *auricomi* p. 224, *angelicivora* p. 225, *luzulae* p. 240, *thysselinivora* p. 242, **spp. n.** Germany figs., HERING Zs. Morph. Oekol. Tiere **2.**

HIPPOBOSCIDAE.

Ornithoctona synonymy of species, notes on, p. 234, FERRIS Ent. News **35.**

Ornithoica, certain species referred to *Ornithoctona* p. 234, FERRIS Ent. News **35.**

Ornithophila maquilingensis **sp. n.** Philippines p. 392 fig., FERRIS Phil. J. Sci. **25.**

Ortholfersia tasmanica redescribed p. 2, *raveni* **sp. n.** N.S.W. p. 4 figs., FERRIS Amer. Mus. Novit. no. **110.**

NYCTERIBIIDAE.

The New World Nycteribiidae, FERRIS Ent. News **35** pp. 191–199 fig.

Nycteribiids parasitic on Ceylon bats, PHILLIPS Spolia Zeylanica **13** p. 70.

Basilia discussion of generic characters p. 193, *forcipata* **sp. n.** U.S.A. p. 196 fig., FERRIS Ent. News **35**.

Cyclopodia pteropus figured, notes p. 5, FERRIS Amer. Mus. Novit. no. **110**.

Eucampsipoda philippinensis **sp. n.** Philippines p. 76 fig., FERRIS Phil. J. Sci. **24**.

STREBLIDAE.

Notes on the Streblinae, KESSEL Parasitology **16** pp. 405–414 8 figs.

Streblids parasitic on Ceylon bats, PHILLIPS Spol. Zeyl. **13** p. 70.

Euctenodes tonatiae **sp. n.** Ecuador p. 411 fig., KESSEL Parasitology **16**.

SIPHONAPTERA.

List of Aphaniptera of the world, DALLA TORRE Ber. naturw. med. Ver. Innsbruck **39** pp. 1–29.

A collection of fleas from Hawaii, EWING Proc. Ent. Soc. Wash. **26** pp. 209–210.

List of Pulicidae of I. of Wight, JEFFERY Proc. I. of Wight N. H. Soc. **1** pt. 3 1922 p. 123.

Ceratophyllus javanicus **sp. n.** Java p. 351 fig., EWING Parasitology **16**.

Hoplopsyllus foxi **sp. n.** California p. 350 fig., EWING Parasitology **16**.

Mioctenopsylla **gen. n.** p. 3, *arctica* **sp. n.** Novaya Zemlya p. 4 figs., ROTHSCHILD Rept. Norw. Exp. Nov. Zeml. no. 4 1922.

Pygiopsylla celebensis Celebes p. 352, *sciuri* Borneo p. 353, **spp. n.** fig., EWING Parasitology **16**.

TRICHOPTERA.

Structure of larval cases of Trichoptera, HUBAULT Ann. Biol. lacustre **13** p. 99 figs.

Classification and evolution of the Phryganeidae, MARTYNOV C.R. Acad. Sci. Russ. **1924** pp. 77–80.

Trichoptera of European Russia and Western Siberia, general morphology and keys, MARTYNOV Pract. Ent. **5** lxvii+388 pp.

Annulipalpia, Integripalpia **n. sub-orders** p. 19, MARTYNOV Pract. Ent. **5.**

Biological notes on Phryganeidae Victoria, SEARLE Vict. Nat. **40** p. 241 figs.

Key to New Zealand genera of Rhyacophilidae, TILLYARD Trans. N.Z. Inst. **55** p. 286.

Nesting instinct in Trichopterous larvae, UHLMANN Verh. D. zool. Ges. **29** pp. 99–102.

Anisogamus atripennis **sp. n.** Calif. p. 440 fig., BANKS Bull. Mus. Comp. Zool. **65.**

Apatania canadensis, shoshone **spp. n.** N. America p. 442 figs., BANKS t.c.

Apolopsyche pallida **sp. n.** Manitoba p. 442 fig., BANKS t.c.

Arctoecia concentrica **f. n.** *euptera* Russia, Siberia p. 242, **subsp. n.** *sibirica* p. 243, MARTYNOV Pract. Ent. **5.**

Arctopsychidae **fam. n.** for *Arctopsyche* McLach. p. 98, MARTYNOV Pract. Ent. **5.**

Atopsyche bolivari **sp. n.** Colombia p. 443 fig., BANKS Bull. Mus. Comp. Zool. **65.**

Baicalina reducta **sp. n.** Lake Baikal p. 94, MARTYNOV C.R. Acad. Sci. Russ. **1924.**

Baicalinella **gen. n.** for *foliata* Mart. Lake Baikal p. 96, MARTYNOV t.c.

Baicalodes **gen. n.** for *ovalis* Mart. Lake Baikal p. 96, MARTYNOV t.c.

Banksiola **gen. n.** (Phryganeidae) type *ncatenata* Walk. p. 216, MARTYNOV nn. Mag. N. H. (9) **14.**

Centromacronema dentatum **sp. n.** Colombia p. 207, NAVÁS Konowia **3.**

Chilostigma subborealis **sp. n.** N. America p. 441 fig., BANKS Bull. Mus. Comp. Zool. **65.**—†*C. ostracoderma* **sp. n.** Green River formation Wyoming p. 310, BRADLEY Amer. J. Sci. **7.**

Chimarrha manni p. 448, *obscurella* Fiji Is., *fraterna, moesta* Cuba p. 449, **spp. n.**, BANKS Bull. Mus. Comp. Zool. **65.**—*C. picea* **sp. n.** Costa Rica p. 79 fig., NAVÁS Broteria **21.**

Colpotaulius minusculus **sp. n.** Colorado p. 439 fig., BANKS Bull. Mus. Comp. Zool. **65.**

Dipseudopsis morosa **sp. n.** Philippines p. 450 fig., BANKS t.c.—*D. discors* **sp. n.** Philippines p. 205 fig., NAVÁS Konowia **3.**

Ecclisomyia complicata **sp. n.** Ontario p. 440 fig., BANKS Bull. Mus. Comp. Zool. **65.**

Ganonema furcatum **sp. n.** Philippines p. 445 fig., BANKS t.c.

Glyphopsyche irrorata **subsp. n.** *sibirica* Ural p. 342, MARTYNOV Pract. Ent. **5.**

Goera fijiana **sp. n.** Fiji p. 444, BANKS Bull. Mus. Comp. Zool. **65.**

Hagenella **gen. n.** type *sibirica* Mart. p. 215, MARTYNOV Ann. Mag. N. H. (9) **14.**

Helicopsyche key, *albescens* p. 312, *howesi* p. 313, **spp. n.** N. Zealand fig., TILLYARD Trans. N. Z. Inst. **55.**

Holocentropus insignis **sp. n.** Petrograd p. 76 fig., MARTYNOV Pract. Ent. **5.**

Hydrobiosella **gen. n.** (Rhyacophilidae) p. 288, *stenocerca* **sp. n.** N. Zealand p. 289 fig., TILLYARD Trans. N. Z. Inst. **55.**

Hydrochorema **gen. n.** (Rhyacophilidae) p. 292, *crassicaudatum* p. 293, *tenuicaudatum* p. 295, **spp. n.** N. Zealand fig., TILLYARD t.c.

Hydromanicus trifasciatus **sp. n.** Philippines p. 450 fig., BANKS Bull. Mus. Comp. Zool. **65.**

Hydropsyche philpotti **sp. n.** N. Zealand p. 301 fig., TILLYARD Trans. N. Z. Inst. **55.**

Hydroptila scent organs p. 291 figs., MOSELY Trans. Ent. Soc. Lond. **1923.**

Lasiocephala basalis gills p. 250 figs., STADLER Arch. Hydrobiol. **15.**

Leptocella serrei **sp. n.** Costa Rica p. 83 fig., NAVÁS Broteria **21.**—*L. cana* **sp. n.** Venezuela p. 254 fig., NAVÁS Ann. Soc. sci. Bruxelles C.R. **43.**

Leptonema insulanum **sp. n.** Porto Rico p. 455, BANKS Bull. Mus. Comp. Zool. **65.**—*L. ferrugineum* p. 80, *faciale* p. 81, **spp. n.** Costa Rica fig., NAVÁS Broteria **21.**

Limnophilus apicalis **sp. n.** Tomsk p. 254 fig., MARTYNOV Pract. Ent. **5.**—*L. toussainti* Haiti, *forcipatus* p. 439, *clausa* p. 440 N. America **spp. n.** figs., BANKS Bull. Mus. Comp. Zoöl. **65.**

Macronema tripunctatus Philippines, *pertyi* p. 451, *hageni*, *lachlani*, *burmeisteri* p. 452, *mülleri* p. 453, *braueri* S. America, *gundlachi* Cuba p. 454, **spp. n.** figs., BANKS Bull. Mus. Comp. Zoöl. **65.**—*M. philippinum* p. 205, *croceum* Mt. Riu p. 207, **spp. n.** fig., NAVÁS Konowia **3.**—*M. centrale* p. 82, *latum* p. 83, **spp. n.** Costa Rica fig., NAVÁS Broteria **21.**

Marilia scudderi Isle of Pines, *wrighti* Cuba, **spp. n.** p. 446 figs., BANKS Bull. Mus. Comp. Zoöl. **65.**

†*Micrasema tessellatum* **sp. n.** Green River, Wyoming p. 311, BRADLEY Amer. J. Sci. **7.**

Mystacides canadensis **sp. n.** Quebec p. 448 fig., BANKS Bull. Mus. Comp. Zoöl. **65.**

Nannophryganea **gen. n.** (Phryganeidae) type *minor* Curt. p. 212, MARTYNOV Ann. Mag. N. H. (9) **14** and p. 206 Pract. Ent. **5.**

Neophryganea **subgen. n.** see *Phryganea.*

Neophylax occidentis **sp. n.** Nevada p. 441 figs., BANKS Bull. Mus. Comp. Zoöl. **65.**

Neurochorema **gen. n.** (Rhyacophilidae) p. 290, *decussatum* **sp. n.** N. Zealand p. 291, fig. TILLYARD Trans. N. Z. Inst. **55.**

Notanatolica novisa Mt. Riu p. 208, *zonata* Br. New Guinea p. 209, **spp. n.,** NAVÁS Konowia **3.**—*N. grisea* **sp. n.** Philippines p. 447 figs., BANKS Bull. Mus. Comp. Zoöl. **65.**

Oecetina peruviana p. 446, *amazonica* p. 447 **spp. n.** S. America figs., BANKS Bull. Mus. Comp. Zool. **65.**

Oecetinella ? punctata **sp. n.** Costa Rica p. 85 fig., NAVÁS Broteria **21.**

Oxyethira albiceps genitalia p. 673 fig., MOSELY Trans. N. Z. Inst. **55.**—*O. tenuella* **sp. n.** Russia p. 54 fig., MARTYNOV Pract. Ent. **5.**

Paroxyethira **gen. n.** (Hydroptilidae) *tillyardi* p. 670, *hendersoni*, *eatoni* p. 673 **spp. n.** New Zealand fig., MOSELY Trans. N. Z. Inst. **55.**

Philopotamus aequalis **sp. n.** Colorado p. 450 fig., BANKS Bull. Mus. Comp. Zoöl. **65.**

Philorheithrus **n. n.** for *Philorheithous* Hare, redescribed p. 303, *lacustris* **sp. n.** N. Zealand p. 305 fig., TILLYARD Trans. N. Z. Inst. **55.**

Phryganea **subgen. n.** *Neophryganea* N. America p. 213, MARTYNOV Ann. Mag. N. H. (9) **14.**

Phryganopsis **gen. n.** (Phryganeidae) type *latipennis* Ulm. p. 211, MARTYNOV Ann. Mag. N. H. (9) **14.**

Phylloicus cubanus **sp. n.** Cuba p. 445, BANKS Bull. Mus. Comp. Zoöl. **65.**

Polycentropus rosselinus **sp. n.** Rossel Is. (New Guinea) p. 204, NAVÁS Konowia **3.**

Prophryganea **gen. n.** type *principalis* Mart. p. 210, *czerskyi* Manchuria, *umbrina* Ussuri **spp. n.** p. 224, MARTYNOV Ann. Mag. N. H. (9) **14.**—*P.*, key p. 185, MARTYNOV Pract. Ent. **5.**

Pycnocentrodes **gen. n.** (Rhyacophilidae) p. 307, key p. 308, *chiltoni* p. 309, *pulchella*, *olingoides* p. 319, *hamiltoni* p. 311, **spp. n.** N. Zealand fig., TILLYARD Trans. N. Z. Inst. **55.**

Radema uncinatum p. 93, *setosum* p. 94, **spp. n.** Lake Baikal, MARTYNOV C.R. Acad. Sci. Russ. **1924.**

Regina **gen. n.** (Phryganeidae) type *regina* McLach. p. 215, MARTYNOV Ann. Mag. N. H. (9) **14.**

Rhyacophila rotunda, *nevadensis* p. 443, *anomala*, *minora* p. 444, **spp. n.** U.S.A. figs., BANKS Bull. Mus. Comp. Zoöl. **65.**

Setodes pretiosella **sp. n.** Peru p. 447, BANKS t.c.

Smicridea comma **sp. n.** Cuba p. 451, BANKS t.c.

Stactobiella **gen. n.** (Hydroptilidae) for *ulmeri* Siltala p. 58, MARTYNOV Pract. Ent. **5.**

Synchorema **gen. n.** p. 296, *zygoneura* **sp. n.** N. Zealand p. 297 fig., TILLYARD Trans. N. Z. Inst. **55.**

Synoestropsis grisoli **sp. n.** Venezuela p. 252 fig., NAVÁS Ann. Soc. sci. Bruxelles C.R. **43.**

Tiphobiosis **gen. n.** (Rhyacophilidae) p. 298, *montana* p. 299, *fulva* p. 300, **spp. n.** N. Zealand fig., TILLYARD Trans. N. Z. Inst. **55.**

Triaenodes detruncata **sp. n.** Russia Siberia, p. 129 fig., *unanimis* **f. n.** *recta* Novgorod p. 129, MARTYNOV Pract. Ent. **5.**—*T. delicata* **sp. n.** Costa Rica p. 84 fig., NAVÁS Broteria **21.**

Triplectides oreolimnetes **sp. n.** N. Zealand p. 306 fig., TILLYARD Trans. N. Z. Inst. **55.**

Ventrarma **gen. n.** (Philopotamidae) p. 76, *implexa* p. 77, *callosa* p. 78 **spp. n.** Costa Rica fig., NAVÁS Broteria **21.**

Wormaldia albata **sp. n.** Costa Rica p. 75, NAVÁS t.c.

Zelandoptila **gen. n.** (Rhyacophilidae) p. 300, *moselyi* **sp. n.** N. Zealand p. 301, fig., TILLYARD Trans. N. Z. Inst. **55.**

NEUROPTERA.

Myrmeleonidae of Bulgaria, Thrace and Macedonia, DIMITROVA Trav. Soc. bulgar. Sci. nat. **11** pp. 68–112 figs.

List of Neuroptera Planipennia, Somerset, Devon, Gloucester, LAIDLAW Proc. Somerset Archaeol. N. H. Soc. **69** p. 54 figs.

Catalogue of Neuroptera of Hungary, MOCSÁRY Fauna Regni Hung. Neuroptera **1918** pp. 33–44.

Studies on Japanese Chrysopidae OKAMOTO Hokkaido Agric. Expt. Sta. Rept. **9** 1919 76 pp. figs.

Early stages of Ascalaphidae, B. E. Afr., VAN SOMEREN Trans. Ent. Soc. Lond. **1924** p. 59.

Notes on biology of British Neuroptera, WITHYCOMBE Entomologist **57** p. 145 figs.

Note on the economic value of the Neuroptera especially the Coniopterygidae, WITHYCOMBE Ann. App. Biol. **11** pp. 112–125 1 pl.

Abatoleon **gen. n.** (Myrmeleonidae) *deprivatum* **sp. n.** Argentina p. 436, BANKS Bull. Mus. Comp. Zoöl. **65.**

Ankylopteryx perpallida, obliqua **spp. n.** Philippines p. 434, BANKS t.c.

Baliga redescribed p. 167, NAVÁS Ann. Soc. sci. Bruxelles C.R. **42.**

Banya **gen. n.** (Myrmeleonidae) *trifasciata* **sp. n.** Africa p. 145, NAVÁS t.c.

Boriomyia (*Hemerobius*) *nervosa* life-history pp. 249–250, MILES Bull. Ent. Res. **14.**

Chauliodes pusillus see *Platychauliodes, C. tenuis* see *Leptochauliodes.*

Chloroniella **gen. n.** (Sialidae) p. 151, *péringueyi* **sp. n.** S. Africa p. 152 figs., ESBEN-PETERSEN Ann. S. Afr. Mus. **19.**

Chrysopa nigripilosa p. 177, *galapagoensis* p. 179, **spp. n.** Galapagos, BANKS Zoologica **5.**—*C. sierra* p. 431, *seminole, slossonae, petersoni* p. 432 U.S.A., *bakeri, valdezi* p. 433 Borneo, *rizali* p. 434 Philippines **spp. n.**, BANKS Bull. Mus. Comp. Zoöl. **65.**—*C. japana* p. 42, *parabola* p. 51, *suzukii* p. 60, *kintoki* p. 62, **spp. n.** Japan figs., OKAMOTO Hokkaido Agric. Expt. Sta. Rept. **9** 1919.—*C. birungana* **sp. n.** C. Africa p. 2, NAVÁS Ark. Zool. **16** no. 13. —*C. lindana* Peru p. 111, *bouvieri* Costa Rica p. 112, *decarlina* p. 113, *metanotalis* Argentina, *berlandi* Costa Rica p. 114 **spp. n.** fig., NAVÁS Rev. chil. Hist. nat. **27.**—*C. sanchezi* **sp. n.** Cuba p. 52, NAVÁS Bol. Soc. ent. España **7.**—*C. extranea* **sp. n.** p. 170, *thoracica* **var. n.** *cerverina* p. 171; *cubana* **var. n.** *mesonota* p. 172 Cuba, NAVÁS Ann. Soc. sci. Bruxelles C.R. **42.**

Cintameva abbreviata **var. n.** *neerlandica* Holland p. 54, NAVÁS Rev. mens. Soc. ent. Namur **23** 1923.

Clathroneuria cubitalis Nav. (=*Nelees cubitalis* Nav.) redescribed p. 168, NAVÁS Ann. Soc. sci. Bruxelles C.R. **42.**

Coniopteryx (= *Malacomyza*) *aegyptiaca* **sp. n.** Egypt p. 146 fig., WITHYCOMBE Bull. Soc. R. ent. Egypte **1923** 1924.

Creoleon falcatus **sp. n.** B. E. Afr. p. 169, NAVÁS Ann. Soc. sci. Bruxelles C.R. **42.**

Dejuna **gen. n.** (Myrmeleonidae) *angusta* **sp. n.** Costa Rica p. 57, NAVÁS Broteria **21.**

Dendroleon notes on spp. and key p. 87, *similis* **sp. n.** China p. 89 figs., ESBEN-PETERSEN Konowia **2** 1923.

Eremophanes **gen. n.** (Ascalaphidae) *bicristatus* **sp. n.** S. Africa p. 438 fig., BANKS Bull. Mus. Comp. Zoöl. **65.**

Formicaleo guttifer **sp. n.** Africa p. 379 fig., NAVÁS Ann. Soc. sci. Bruxelles C.R. **43.**

Gandulus madegassus **sp. n.** Madagascar p. 146, NAVÁS t.c.

Goliva see *Nadiva.*

Haploglenius extensus **sp. n.** Bolivia p. 437, BANKS Bull. Mus. Comp. Zoöl. **65.**

Hemerobius algonquinus, hesperus **spp. n.** U.S.A. p. 429 fig., BANKS Bull. Mus. Comp. Zoöl. **65.**—*H. cañadai* **sp. n.** Spain p. 106 fig., NAVÁS Bol. Soc. ent. España **7.**—*H. ceraticus* **sp. n.** C. Africa, p. 2, NAVÁS Ark. Zool. **16** no. 13.

Leptochauliodes **gen. n.** (Sialidae) for *Chauliodes tenuis* MacL. p. 157 S. Africa figs., ESBEN-PETERSEN Ann. S. Afr. Mus. **19.**

Leucochrysa bedoci **sp. n.** Cuba p. 115, NAVÁS Rev. chil. H. n. **27.**

Lomamyia hubbardi **sp. n.** Florida p. 430, BANKS Bull. Mus. Comp. Zoöl. **65.**

Loyola tripunctata **sp. n.** Brazil p. 435, BANKS t.c.

Malacomyza see *Coniopteryx.*

Mantispilla viridata p. 59, *rubricata* p. 60, **spp. n.** Costa Rica, NAVÁS Broteria **21.**

Megalomus darwini **sp. n.** Galapagos p. 179, BANKS Zoologica **5.**

Morter hyalinus **var. n.** *mauritanica* Morocco p. 167, NAVÁS Ann. Soc. sci. Bruxelles C.R. **42.**—*M. ferrosus* **sp. n.** Brazil p. 249, NAVÁS op. cit. C.R. **43.**

Myrmeleon life-history and development, p. 125, LEIBERG Ent. Anz. **4.**—*M.*, psychology p. 3, habits p. 22, STÄGER Schweizer ent. Anz. **3.**—*M. perpilosus* **sp. n.** Galapagos p. 177, BANKS Zoologica **5.**—*M. leptaleus* **sp. n.** Costa Rica p. 55 fig., NAVÁS Broteria **21.**—*M. praedator* Walk. see *Mystroleon.*

Mystroleon **gen. n.** type *Myrmeleon praedator* Walk. Brazil p. 436, BANKS Bull. Mus. Comp. Zool. **65.**

Nadiva (= *Goliva* and *Rameta*) p. 431, BANKS t.c.

Nelees linarixius **sp. n.** Sudan p. 378 fig., NAVÁS Ann. Soc. sci. Bruxelles C.R. **43.**—*N. cubitalis* see *Clathroneuria.*

Neurorthus systematic position pp. 65–72, LESTAGE Ann. Soc. ent. Belg. **64.**

Nodita cerverai **sp. n.** Cuba p. 172, NAVÁS Ann. Soc. sci. Bruxelles C.R. **42.**—*N. serrei* **sp. n.** Costa Rica p. 110 fig., NAVÁS Rev. chil. Hist. nat. **27.**—*N. firmini* **sp. n.** Cuba p. 51, NAVÁS Bol. Soc. ent. España **7.**

Nolima infensus **sp. n.** Costa Rica p. 61 fig., NAVÁS Broteria **21.**

Palpares sparsus **var. n.** *marginalis* Africa p. 143, NAVÁS Ann. Soc. sci. Bruxelles C.R. **43.**

Parasemidalis pallida **sp. n.** Egypt p. 141 fig., WITHYCOMBE Bull. Soc. R. ent. Egypte **1923** 1924.

Platychauliodes **gen. n.** (Sialidae) for *Chauliodes pusillus* S. Africa p. 155 fig., ESBEN-PETERSEN Ann. S. Afr. Mus. **19.**

Protosemidalis **gen. n.** (Coniopterygidae) p. 474, *pluriramosa* **sp. n.** Egypt p. 476, KARNY Ann. Mag. N. H. (9) **13.**

Rameta see *Nadiva.*

Spilosmylus formosus **sp. n.** Philippines p. 430 fig., BANKS Bull. Mus. Comp. Zoöl. **65.**—*S. saishiuensis* **sp. n.** Quelpart Island p. 70 fig., OKAMOTO Bull. Agric. Expt. Sta. Govt. Gen. Chosen **1.**

Stenares arenosus **sp. n.** Sudan p. 376 fig., NAVÁS Ann. Soc. sci. Bruxelles C.R. **43.**

Sympherobius pygmaeus Rambur (*striatellus* Klp.) distribution p. 67, LESTAGE Bull. Soc. ent. Belg. **6.**

Taeniochauliodes **gen. n.** (Sialidae) p. 153, *ochraceopennis* **sp. n.** Africa p. 154 figs., ESBEN-PETERSEN Ann. S. Afr. Mus. **19.**

Tomatares clavicornis **var. n.** *linarixi* Sudan p. 278 fig., NAVÁS Ann. Soc. sci. Bruxelles C.R. **43.**

Ululodes sinuatus **sp. n.** Ecuador p. 437, BANKS Bull. Mus. Comp. Zoöl. **65.**

Weelius triseriatus **sp. n.** Fiji p. 435, BANKS Bull. Mus. Comp. Zoöl. **65.**

MECOPTERA.

Genitalia of Mecoptera, PHILPOTT Trans. Ent. Soc. **1923** p. 347 figs.

Boreus hiemalis, westwoodi in Poland, FUDÁKOWSKI Polsk. Pismo ent. **2** pp. 202–204.

HEMIPTERA.

New observations on the Hemiptera that suck human blood, BERGEVIN Bull. Soc. Hist. nat. Afr. N. **15** pp. 259–262 fig.

New records of Hemiptera from Br. Columbia, DOWNES Proc. Br. Columbia Ent. Soc. **12** pp. 27–33.

Catalogue of Hemiptera of Hungary, HORVATH Fauna Regni Hung. Hemipt. 1918 pp. 5–64.

Rhynchota of the Siju cave, Assam, KEMP Rec. Ind. Mus. **26** pp. 93–96.

Hemiptera of Turkish Armenia, KIRITSHENKO Wiener ent. Ztg. **41** pp. 1–5.

The causes of coloration in various Hemipterous families, PALMER & KNIGHT J. Biol. Chem. **59** pp. 443–455.

German, Austrian, Hungarian, Bulgarian and Rumanian literature on Hemiptera 1917–1918, STICHEL Zs. wiss. Insektenbiol. **19** pp. 104–108.

Aquatic Hemiptera collected in Barbados and Antigua in 1918, TORRE-BUENO Univ. Iowa Studies N. H. **10** no. 3 1923 pp. 30–38 1 pl.

Heteroptera.

Report on certain families of the Hemiptera-Heteroptera collected by the Barbados-Antigua Expedition from the University of Iowa in 1918, BARBER Univ. Iowa Studies N. H. **10** no. 3 1923 pp. 17–29.

Notes on early stages of British Heteroptera, BUTLER Ent. Mo. Mag. **60** p. 265.

The Hemiptera-Heteroptera from Rodriguez with synonymic notes, CHINA Ann. Mag. N. H. (9) **14** pp. 427–452 figs.

Heteroptera of Belgium, LEMAIRE Bull. Soc. ent. Belg. **6** pp. 57–61.

Some annectant bugs of the superfamily Cimicoidea, MCATEE & MALLOCH Bull. Brooklyn Ent. Soc. **19** pp. 69–82 1 pl.

Wings of Heteroptera, TEODORO Boll. Soc. ent. ital. **56** pp. 34–48 & 124–126.

Structure of elytra of Hemiptera-Heteroptera, TEODORO Redia **15** pp. 79–95 fig.

CYDNIDAE.

Geotomus cavicollis **sp. n.** Florida p. 85, BLATCHLEY Ent. News **35.**

PENTATOMIDAE.

The Scutelleroidea of Iowa, keys, synonymy, STONER Univ. Iowa Studies N. H. **8** no. 4 1920 140 pp. 7 pls.

Scutelleroidea collected in Barbados and Antigua in 1918, STONER Univ. Iowa Studies N. H. **10** no. 1 1922 pp. 3–17 fig.

Scutelleroidea of the Douglas Lake region, Michigan, STONER Univ. Iowa Studies N. H. **10** no. 1 1922 pp. 45–65.

Aednus niger **sp. n.** Sumatra p. 33 BERGROTH N. Beitr. syst.-Ins. **3.**

Bathycoelia flavolimbata **sp. n.** Rodriguez p. 428, CHINA Ann. Mag. N. H. (9) **14.**

Carpocoris pudicus **f. n.** *fumarius* Germany p. 202, STICHEL Intern. ent. Zs. **18.**

Coridiinae **n. n.** for Dinidorinae p. 335, SCHUMACHER D. ent. Zs. **1924.**

Eurydema festivum synonymy p. 250, ROYER Bull. Soc. ent. Fr. **1923**.—*E. dominulus* **f. n.** *immaculata* Potsdam p. 202, STICHEL Intern. ent. Zs. **18**.

Eurygaster maurus **f. n.** *personatus* Berlin p. 201, STICHEL Intern. ent. Zs. **18**.

Odontoscelis dorsalis **f. n.** *deserta* Germany p. 201, STICHEL t.c.

Perillus bioculatus colours pp. 443–449, PALMER & KNIGHT J. Biol. Chem. **59**.

Podops key p. 88, *peninsularis* **sp. n.** Florida p. 87, BLATCHLEY Ent. News **35**.

Sciocoris cursitans **ff. n.** *transita, vilarsi* Germany p. 202, STICHEL Intern. ent. Zs. **18**.

COREIDAE.

Monograph of Russian Coreinae with keys to subfamilies, KIRITSHENKO Faune Russ. Hemipt. **6** 1916 pt. 2 pp. 1–395.

Acanthocephala hamata **sp. n.** Brazil p. 33, BERGROTH N. Beitr. syst.-Ins. **3**.

Anoplocnemis dallasi **sp. n.** Korea & China p. 64 fig., KIRITSHENKO Faune Russ. Hemipt. **6** pt. 2 1916.

Centrocoris inflaticeps **sp. n.** Transcaspia p. 297 fig., KIRITSHENKO t.c.

Ceratopachys variabilis Dall. see *Omanocoris*.

Cercinthinus **gen. n.** p. 316, *annulipes* **sp. n.** Turkestan p. 321 fig., KIRITSHENKO t.c.

Chelinidea, review of genus pp. 193–208, HAMLIN Ann. Ent. Soc. Amer. **17**. —*C. hunteri* p. 43, *canyona* p. 44, **spp. n.**, *vittigera* **var. n.** *texana* p. 45, Texas & Mexico, HAMLIN Proc. R. Soc. Queensland **35**.

Cimolus obscurus life-history and stages pp. 197–205 fig., JONES Proc. Ent. Soc. Wash. **26**.

Cletomorpha sumatrana **sp. n.** Sumatra p. 36, BERGROTH N. Beitr. syst. Ins. **3**.

Cletus tenuis China p. 185, *schmidti* Korea p. 192, **spp. n.** fig., KIRITSHENKO Faune Russ. Hemipt. **6** pt. 2 1916.

Dasynus corporaali **sp. n.** Sumatra p. 35, BERGROTH N. Beitr. syst. Ins. **3**.

Discogaster fuliginosus Uhler see *Molipteryx*.

Gonocerus patellatus **sp. n.** Turkestan and Transcaspia p. 163 fig., KIRITSHENKO Faune Russ. Hemipt. **6** pt. 2 1916.

Harmostes corizoides **sp. n.** Argentina p. 328 fig., JENSEN-HAARUP Ent. Medd. **14**.

Homoeocerus sticheli **sp. n.** Sumatra p. 34, BERGROTH N. Beitr. syst. Ins. **3**.

Leptocorisa key p. 235, *corbetti* p. 237, Fed. Malay States, *geniculata* p. 238 Philippines **spp. n.**, CHINA Bull. Ent. Res. **14**.

Margus pallidus **sp. n.** Argentina p. 337, JENSEN-HAARUP Ent. Medd. **14**.

Mesocerus marginatus **var. n.** *orientalis* Turkestan p. 215, *omoxys* **sp. n.** Korea p. 217 fig., KIRITSHENKO Faune Russ. Hemipt. **6** pt. 2 1916.

Mictis camelina p. 53, *potanini* p. 55 **spp. n.** China fig., KIRITSHENKO t.c.

Molipteryx **gen. n.** for *Discogaster fuliginosa* Uhler and *Ochrochira lunata* Dist. p. 32 fig., KIRITSHENKO t.c.

Ochrochira lunata Distant see *Molipteryx*.

Omanocoris **gen. n.** for *Ceratopachys variabilis* Dall. p. 83 fig., KIRITSHENKO t.c.

Sephina indierae **sp. n.** Porto Rico p. 251, WOLCOTT J. Dept. Agric. P. R. **7**.

Sinotagus **gen. n.** p. 100, *nasutus* **sp. n.** China p. 105 fig., KIRITSHENKO Faune Russ. Hemipt. **6** pt. 2 1916.

Stictopleurus riveti **sp. n.** Macedonia p. 247, ROYER Bull. Mus. Hist. nat. Paris **1923**, and p. 197 op. cit. **1924**.

ARADIDAE.

Aradus debilis notes on, pp. 145–146, PARSHLEY Bull. Brooklyn Ent. Soc. **19**.

DYSODIIDAE.

Mezira gulliveri **sp. n.** Rodriguez p. 430 figs., CHINA Ann. Mag. N. H. (9) **14**.—*M. novella* **sp. n.** Florida p. 88, BLATCHLEY Ent. News **35**.

TERMITOCORIDAE (TERMITAPHIDIDAE).

Termitaphididae **n. n.** for Termitocoridae Silv. p. 267, systematic position (near Aradidae) pp. 259–267, MYERS Psyche **31.**

Termitaphis certain species referred to *Termitaradus.*

Termitaradus **gen. n.** p. 270 for *panamensis* (type) Panama p. 273, and certain species of *Termitaphis,* MYERS Psyche **31.**

BERYTIDAE.

Berytus pygmaeus synonymy p. 118, ROYER Bull. Soc. ent. Fr. **1924.**

LYGAEIDAE.

Aphanus brevirostris var. *immaculatus* synonymy p. 250, ROYER Bull. Soc. ent. Fr. **1923.**

Caenocoris pontifex **sp. n.** Sumatra p. 36, BERGROTH N. Beitr. syst.-Ins. **3.**

Caridops globicollis **sp. n.** Sumatra, p. 37, BERGROTH t.c.

Clerada minuta **sp. n.** Rodriguez p. 435 fig., CHINA Ann. Mag. N. H. (9) **14.**

Cnemodus hirtipes **sp. n.** Florida p. 90, BLATCHLEY Ent. News **35.**

Cymus key p. 89, *robustus* New York p. 87, *reductus* Arizona p. 88, **spp. n.,** BARBER Bull. Brooklyn Ent. Soc. **19.**

Esuris castanea Barber see *Neosuris.*

Geocoris lynceus **sp. n.** Russia p. 37, LINDBERG Konowia **3.**

Henestaris cremeus **sp. n.** Armenia p. 4, KIRITSHENKO Wiener ent. Ztg. **41.**

Lachnesthus **n. n.** for *Lachnophorus* Reut. (nec Dej.)p. 173, BERGROTH J. Bombay N. H. Soc. **24** 1915.

Lachnophorus Reut. (nec Dej.) see *Lachnesthus.*

Leptodemus bicolor **sp. n.** Transcaspia p. 39, LINDBERG Konowia **3.**

Lethaeus snelli **sp. n.** Rodriguez p. 434, CHINA Ann. Mag. N. H. (9) **14.**

Ligyrocoris slossoni further description p. 135, BARBER J. N. Y. Ent. Soc. **32.**

Lygaeus discussion p. 18, PARSHLEY Can. Ent. **56.**

Neosuris **gen. n.** for *Esuris castanea* Barber p. 133, BARBER J. N.Y. Ent. Soc. **32.**

Noualhieria pieltaini **sp. n.** Canary Is. p. 152, key p. 154, MENOR Bol. Soc. esp. Hist. nat. **24.**

Orthaea intermedius **n. n.** for *ferruginosa* Barber p. 136, BARBER J. N. Y. Ent. Soc. **32.**

Pachygrontha obluctans **sp. n.** Sumatra p. 37, BERGROTH N. Beitr. syst. Ins. **3.**

Paromius excelsus **sp. n.** Philippines p. 82, BERGROTH Ann. Soc. ent. Belg. **64.**

Phthonosteres **gen. n.** type *Tropistethus aurantiacus* Distant p. 82, CHINA Entomologist **57.**

Platyplax inermis synonymy p. 250, ROYER Bull. Soc. ent. Fr. **1923.**

Plinthisus maderi **sp. n.** Austria p. 40, LINDBERG Konowia **3.**

Ptochiomera (*Carpilis*) *barberi* **sp. n.** Florida p. 89, BLATCHLEY Ent. News **35.**

Tropistethus aurantiacus Distant see *Phthonosteres.*

PYRRHOCORIDAE.

Pyrrhocoris apterus embryonic development of sex organs p. 429 figs., SEIDEL Zs. Morph. Oekol. Tiere **1.**

TINGIDAE.

Notes on name Tingitidae, HOLLAND Ann. Ent. Soc. Amer. **17** pp. 95–96.

Acalypta, key to U.S.A. spp., p. 50, addition to key p. 93, TORRE-BUENO Bull. Brooklyn Ent. Soc. **19.**

Acanthocheila tumida **sp. n.** Bolivia p. 94, DRAKE Bull. Brooklyn Ent. Soc. **19.**

Atheas pallidus see *Leptopharsa illudens.*

Gelchossa heidemanni bionomics New Jersey pp. 56–60, WEISS & WEST Ent. News **35.**

Leptopharsa illudens Drake (= *Atheas pallidus*) p. 136, BARBER J. N. Y. Ent. Soc. **32.**

Litadea **gen. n.** p. 438, *delicatula* **sp. n.** Rodriguez p. 439 figs., CHINA Ann. Mag. N. H. (9) **14.**

Macateella **gen. n.** p. 85, *splendida* **sp. n.** Australia p. 86, DRAKE Proc. Ent. Soc. Wash. **26.**

Stephanitis quercus **sp. n.** Philippines p. 83, BERGROTH Ann. Soc. ent. Belg. **64.**

Teleonemia insularis **sp. n.** Rodriguez p. 436 fig., CHINA Ann. Mag. N. H. (9) **14.**

PIESMIDAE.

Piesma spp. notes and synonymy p. 146, STICHEL Intern. ent. Zs. **18.**—*P. cinerea* early stages p. 230 fig., BARBER Psyche **31**; distribution and bionomics pp. 233–235, WEISS & LOTT Psyche **31.**

ENICOCEPHALIDAE.

Enicocephalus cubanus **sp. n.** fig. Cuba p. 54, BRUNER Mem. Soc. "Felipe Poey" **6.**—*E. dominicus* **sp. n.** Dominica p. 39, BRUNER Bull. Brooklyn Ent. Soc. **19.**

REDUVIIDAE.

Notes on some neotropical Reduviidae, FRACKER & BRUNER Ann. Ent. Soc. Amer. **17** pp. 163–174 fig.

Castolus multicinctus **var. n.** *nigrocoris* Cuba p. 171, FRACKER & BRUNER Ann. Ent. Soc. Amer. **17.**

Ceballum **subgen. n.** see *Hygromystes.*

Doldina antiguensis **sp. n.** Antigua p. 28, BARBER Univ. Iowa Studies N. H. **10** no. 3 1923.

Ectrichodiella **gen. n.** *cubensis* **sp. n.** Cuba p. 167 fig., FRACKER & BRUNER Ann. Ent. Soc. Amer. **17.**

Hammatocerinae see Microtominae.

Heniartes maestralis **sp. n.** Cuba p. 169, FRACKER & BRUNER t.c.

Hygromystes (*Ceballum* **subgen. n.**) *armatus* **sp. n.** Cuba p. 172, FRACKER & BRUNER t.c.

Microtominae **n. n.** for Hammatocerinae p. 336, SCHUMACHER D. ent. Zs. **1924.**

Myiophanes kempi **sp. n.** Assam p. 96, CHINA Rec. Ind. Mus. **26.**

Pselliopus latifasciatus **sp. n.** Louisiana p. 211, BARBER Proc. Ent. Soc. Wash. **26.**

Saica meridionalis **sp. n.** Brazil p. 164, FRACKER & BRUNER Ann. Ent. Soc. Amer. **17.**

Sindala acuminata **sp. n.** Cuba p. 173, FRACKER & BRUNER t.c.

Stenolaemus Egyptian species pp. 84–90 figs., HORVATH Bull. Soc. R. ent. Egypte **1924.**

Triatoma bouvieri **sp. n.** Annam p. 67, *maxima* ♀ described p. 280 fig., LARROUSSE Ann. Parasit. hum. & comp. **2.**

Vescia minima **sp. n.** Brazil p. 166, FRACKER & BRUNER Ann. Ent. Soc. Amer. **17.**

Vesciinae **subfam. n.** p. 165, FRACKER & BRUNER t.c.

MESOVELIIDAE.

Mesovelia cryptophila **sp. n.** Michigan p. 454 fig., HUNGERFORD Ann. Ent. Soc. Amer. **17.**—*M. douglasensis* **sp. n.** Michigan p. 143, HUNGERFORD Can. Ent. **56.**

NABIDAE.

Neogorpis **gen. n.** for *Gorpis neotropicalis* Barber p. 136, BARBER J. N. Y. Ent. Soc. **32.**

CIMICIDAE.

Acanthia see *Cimex.*

Cimex genotype fixed as *lectularius* L. p. 19, INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE Smithsonian Misc. Coll. **73** no. 2.—*C. lectularius* mouthparts pp. 71–73 fig., LEON Ann. Parasit. hum. & comp. **2**; anatomy pp. 84–97 & 269–278 fig., PURI Parasitology **16.**

MICROPHYSIDAE.

Idiotropus, generic description p. 70 *gagates* **sp. n.** U.S.A. p.71 fig., MCATEE & MALLOCH Bull. Brooklyn Ent. Soc. **19.**

Myrmedobia obliqua **sp. n.** France p. 228 fig., RIBAUT Bull. Soc. Hist. nat. Toulouse **50** 1922.

CAPSIDAE (MIRIDAE).

Campylomma selecta **sp. n.** Rodriguez p. 444 fig., CHINA Ann. Mag. N. H. (9) **14.**

Chaetocapsus scotti **sp. n.** Rodriguez p. 442 fig., CHINA t.c.

Clivinema fusca **sp. n.** Br. Columbia p. 29, DOWNES Proc. Br. Columbia Ent. Soc. **21.**

Heterocordylus genistae early stages p. 249, BROWN Ent. Mo. Mag. **60.**

Notostira erratica redescribed p. 50, BUTLER Ent. Mo. Mag. **60.**

Orthotylus althaeae **n. n.** for *delicatus* Cook p. 165, HUSSEY Bull. Brooklyn Ent. Soc. **19.**

Peritropis key p. 71, *tuberculatus* **sp. n.** Guatemala p. 72, MCATEE & MALLOCH Bull. Brooklyn Ent. Soc. **19.**

Rhabdoscytus **gen. n.** (near *Grypocoris*) p. 8, *guldei* **sp. n.** Corsica p. 9, HORVÁTH Folia ent. hung. **1.**

Stenodema synonymy of species p. 251, ROYER Bull. Soc. ent. Fr. **1923.**

Trevessa **gen. n.** p. 445, *albidopicta* **sp. n.** p. 446 Rodriguez figs., CHINA Ann. Mag. N. H. (9) **14.**

ISOMETOPIDAE.

Classification of Isometopidae, BERGROTH Not. ent. **4** pp. 4–5.

Alcecoris **gen. n.** p. 80, *periscopus* **sp. n.** Timor p. 81 fig., MCATEE & MALLOCH Bull. Brooklyn Ent. Soc. **19.**

Corticoris key p. 78 figs., MCATEE & MALLOCH t.c.—See *Dendroscirtus.*

Dendroscirtus **n. n.** for *Corticoris* p. 4, BERGROTH Not. ent. **4.**

Diphlebinae **subfam. n.** p. 4, BERGROTH Not. ent. **4.**

Diphleps **gen. n.** p. 5, *unica* **sp. n.** N. America p. 7 fig., BERGROTH Not. ent. **4.**—*D.*, further description p. 73 figs., MCATEE & MALLOCH Bull. Brooklyn Ent. Soc. **19.**

Isometopinae **subfam. n.** with tribes *Isometoparia* p. 4 and *Myiommaria* p. 5, BERGROTH Not. ent. **4.**—I., synonymy, key to genera p. 74, MCATEE & MALLOCH Bull. Brooklyn Ent. Soc. **19.**

Sophianus key p. 77, *schwarzi* **sp. n.** Guatemala p. 77, MCATEE & MALLOCH t.c.

Teratodia **gen. n.** p. 7, *emoritura* **sp. n.** N. America p. 8 fig., BERGROTH Not. ent. **4.**—*T.*, possibly male of *Diphleps* p. 73, MCATEE & MALLOCH Bull. Brooklyn Ent. Soc. **19.**

Wetmorea **gen. n.** *notabilis* **sp. n.** Arizona p. 80 fig., MCATEE & MALLOCH t.c.

VELIIDAE.

Microvelia key to spp. of Western Hemisphere p. 187, preliminary key to species in the Americas p. 189, *austrina* **sp. n.** N. Carolina p. 191, list of American p. 194, TORRE-BUENO Bull. Brooklyn Ent. Soc. **19.**—*M. gerhardi* **sp. n.** Colorado p. 164, HUSSEY Bull. Brooklyn Ent. Soc. **19.**

Rhagovelia, key to N. American p. 244, *rivale* Kansas p. 247, *flavicincta* N. Carolina p. 249, *arctoa* Minnesota p. 250, **spp. n.**, TORRE BUENO Trans. Amer. Ent. Soc. **50.**

GERRIDAE.

Gerris buenoi early stages pp. 424–426, HOFFMAN Ann. Ent. Soc. Amer. **17.**—*G. chilensis* Berg alate example p. 38, PORTER Rev. chil. Hist. nat. **27.**

Halobates apicalis Formosa p. 112, *shiranui* p. 114, *japonicus* p. 115 Japan, *matsumurai* Formosa p. 117, **spp. n.** fig., ESAKI Psyche **31.**

Halovelia maritima notes pp. 29–34, ESAKI Bull. Brooklyn Ent. Soc. **19.**

Limnoporus rufoscutellatus early stages pp. 427–430, HOFFMAN Ann. Ent. Soc. Amer. **17.**

Strongylovelia **gen. n.** p. 228, *formosa* **sp. n.** Formosa p. 229 fig., ESAKI Ann. Ent. Soc. Amer. **17.**

Trepobates pictus early stages pp. 420–423, HOFFMAN Ann. Ent. Soc. Amer. **17.**

SALDIDAE (ACANTHIIDAE).

Acanthia celeripedis p. 296, *bellatrix* p. 298, **spp. n.** Alberta, TORRE-BUENO Can. Ent. **56.**—*A. subcarinata* **sp. n.** Rodriguez p. 447 fig., CHINA Ann. Mag. N. H. (9) **14.**

NAUCORIDAE.

Aphelocheirus aestivalis biology and distribution pp. 281–287, DEKSBAKH Arb. Biol. Wolga-Sta. **6** 1923; morphology, physiology, biology pp. 1–21 fig., LARSÉN Ark. Zool. **16** no. 16.

NEPIDAE.

Curicta angusta **sp. n.** N. Australia p. 509 fig., HALE Rec. S. Aust. Mus. **2.** —*C. drakei* biology pp. 324–331 1 pl., WILEY Ent. News **35.**

Ranatra australiensis **sp. n.** life-history Australia pp. 510–518 figs., HALE Rec. S. Aust. Mus. **2.**—*R.*, reflex instincts p. 112 fig., MOTAS Ann. sci. Univ. Jassy **13.**

BELOSTOMIDAE.

Belostoma impavidum **sp. n.** Antigua p. 32 fig., TORRE-BUENO Univ. Iowa Studies N. H. **10** no. 3 1923.

Lethocerus americanus last moult p. 369, TORRE-BUENO Ent. News **35**; biology pp. 175–183, HOFFMAN Psyche **31.**

NOTONECTIDAE, CORIXIDAE.

Arctocorisa antiguensis **sp. n.** Antigua & Barbados p. 31, TORRE-BUENO Univ. Iowa Studies N. H. **10** no. 3 1923.

Buenoa limnocastoris stridulation p. 223, *macrotibialis* **spp. n.** Michigan p. 225 fig., HUNGERFORD Ann. Ent. Soc. Amer. **17.**

Corixa monticellii **sp. n.** Italy p. 200, CAROLI Monitore zool. ital. **35.**— See *Sigara.*

Cymatia coleoptrata oviposition, TEYROVSKY Ceskoslov. ent. spolecn. Jubilej. Sbornik 1924 pp. 100–101 fig.

Micronecta dubia **sp. n.** Rodriguez p. 451 fig., CHINA Ann. Mag. N. H. (9) **14.**

Notonecta glauca, bite of, p. 143 figs., HASE Zool. Anz. **59.**

Porocorixa eggs and migration Australia p. 133 figs., HALE S. Aust. Nat. **5.**

Sigara (=*Corixa*) notes p. 337, SCHUMACHER D. ent. Zs. **1924.**

PELORIDIIDAE.

Hemiodoecus **gen. n.** p. 199, *leai* **sp. n.** Tasmania p. 200 figs., CHINA Ent. Mo. Mag. **60.**

Xenophyes **gen. n.** *cascus* **sp. n.** N. Zealand p. 180 fig., BERGROTH Ent. Mo. Mag. **60.**

Homoptera.

Symbionts in connection with the systematics of Homoptera, BUCHNER Verh. D. zool. Ges. **29** pp. 48–54.

Neotropical Homoptera of the Carnegie Museum, OSBORN Ann. Carnegie Mus. **15** pp. 383–462 fig.

Genitalia of Homoptera and other insects, PRUTHI Q. J. Microsc. Sci. **69** p. 59.

CICADIDAE.

Cicadas of Malaysia: addenda and corrigenda, MOULTON J. F. M. S. Mus. **11** pp. 351–352.

Amplihuechys **subgen. n.** see *Huechys.*

Cicada thomasseti **sp. n.** Rodriguez p. 452 figs., CHINA Ann. Mag. N. H. (9) **14.**

Cicadetta montana **f. n.** *petryi* Germany p. 334, SCHUMACHER D. ent. Zs. **1924.**

Huechys key (*Amplihuechys* **subgen. n.**) p. 204, *curvata* p. 207, *parvula* p. 211, *quadrispinosa* p. 213 (fig.), *fretensis, insularis* **spp. n., ff. n.** *sumatrana* p. 215, *niasenis, borneensis, lombokensis* p. 216, *pingenda* **f. n.** *breddini* p. 205, *facialis* **f. n.** *obscura* p. 207, *incarnata* **ff. n.** *aterrima, venosa, novaeguineensis* p. 210, *brunnea* p. 211, *phoenicura* **ff. n.** *palawanensis, balabakensis* p. 212, India and Asiatic Archipelago, HAUPT D. ent. Zs. **1924.**

Maua philippinensis Phillippines p. 285, *ackermanni* Sumatra p. 287, **spp. n.,** SCHMIDT Ent. Mitt. **13.**

Pomponia bullata Java, *similis* Sumatra, **spp. n.** p. 48, SCHMIDT Soc. ent. **39**

Scieroptera sanaoensis **sp. n.** Philippines p. 288, SCHMIDT Ent. Mitt. **13.**

Tettigarctia crinita, habits in N.S.W., systematic position p. 238, ASHTON Proc. R. Soc. Vict. **36.**

Tibicen pruinosa **var. n.** *fulva* Kansas p. 200, BEAMER Can. Ent. **56.**

FULGOROIDEA.

A translation of the descriptions of various Egyptian species of Fulgoroidea described in 1908 and 1910 by Matsumura, DEBSKI Bull. Soc. R. ent. Egypte **1923** 1924 pp. 13–17.

FULGORIDAE.

Anecphora raatz-brockmanni **sp. n.** French Congo p. 21, SCHMIDT Soc. ent. **39.**

Euphria amorifera **sp. n.** Sumatra p. 295, SCHMIDT Ent. Mitt. **13.**

Holodictya obscuripennis **sp. n.** Congo p. 100, SCHMIDT t.c.

Laternaria phosphorea not luminous p. xlix-l, CHINA Trans. Ent. Soc. **1924.**

Mamatola conspersa **sp. n.** Congo p. 103, SCHMIDT Ent. Mitt. **13.**

Pseudodictya **gen. n.** p. 101, *splinteri* **sp. n.** Rhodesia, Congo p. 102, SCHMIDT t.c.

Rühlella **gen. n.** p. 21, *pulchra* Kamerun, Congo, *superba* Kamerun p. 22, **spp. n.**, SCHMIDT Soc. ent. **39.**

Zaumseilia **gen. n.** p. 98, *electa* **sp. n.** Congo p. 99, SCHMIDT Ent. Mitt. **13.**

DICTYOPHARIDAE.

Bananella **gen. n.** p. 105, *rubrinervis* **sp. n.** Congo p. 106, SCHMIDT Ent. Mitt. **13.**

Dorysarthrus key p. 98, *alfierii* **sp. n.** Egypt p. 94 fig., BERGEVIN Bull. Soc. R. ent. Egypte **1924.**

Lagoana livida p. 104, *rotundata* p. 105 **spp. n.** Congo, SCHMIDT Ent. Mitt. **13.**

Parahydriena **gen. n.** *hyalina* **sp. n.** Porto Rico p. 464 fig., MUIR Proc. Hawaiian Ent. Soc. 1923 **5.**

Parorgerius peyerimhoffi **sp. n.** Morocco p. 255 fig., BERGEVIN Bull. Soc. Hist. nat. Afr. N. **15.**

CIXIIDAE.

Key to N. Zealand genera of Cixiidae, MYERS Trans. N. Z. Inst. **55** p. 317.

Cixius montanus **sp. n.** Austria p. 296, HAUPT Konowia **3.**—*C. kermadecensis* **sp. n.** N. Zealand p. 319, MYERS Trans. N. Z. Inst. **55.**

Cubana tortriciformis **sp. n.** Porto Rico p. 461, MUIR Proc. Hawaiian Ent. Soc. 1923 **5.**

Euryphlepsia cocos **sp. n.** Solomon Isl. p. 456 fig., MUIR Bull. Ent. Res. **14.**

Huttia **gen. n.** *nigrifrons* p. 321, *harrisi* p. 322, **spp. n.** N. Zealand, fig., MYERS Trans. N. Z. Inst. **55.**

Koroana **gen. n.** *helena* p. 319, *arthuria* p. 320, **spp. n.** N. Zealand fig., MYERS t.c.

Malpha **gen. n.** *muiri* p. 322, *iris, duniana, cockcrofti* p. 323, **spp. n.**, N. Zealand. fig., MYERS t.c.

Oliarus oppositus nymph p. 343 fig., HUDSON Trans. N. Z. Inst. **55.**—*O. hyalinipennis, lucidipes* p. 512, *fuscipennis* p. 513, *flavipes, granulatus* p. 514, *longulus*, p. 515, *prolongulus, longicauda* p. 516, *dispar* p. 518, *proprius, maculipennis* p. 519, *brunnifrons, proimpeditus* p. 520, *impeditus, singularis* p. 521, *bakeri, pallidifrons* p. 522, *bilineatus* p. 523, *acuminatus, albomaculata* p. 524, *borneensis* p. 525, *exiguus, laratensis* p. 526 Malaya **spp. n.** fig., MUIR Phil. J. Sci. **24.**—*O. atkinsoni* **sp. n.** N. Zealand p. 325 fig., MYERS Trans. N. Z. Inst. **55.**

Tiriteana **gen. n.** *clarkei* **sp. n.** N. Zealand p. 325 fig., MYERS Trans. N. Z. Inst. **55.**

ACHILIXIIDAE.

Bebaiotes **gen. n.** p. 33, *bucayensis, nigrigaster* **spp. n.** Ecuador p. 34 fig., MUIR Can. Ent. **56.**

DELPHACIDAE.

Studies in N. American Delphacidae, MUIR & GIFFARD H.S.P.A. Ent. Bull. **15** 53 pp. figs.

Araeopus meridionalis **sp. n.** Greece p. 297, HAUPT Konowia **3.**

Burnilia **gen. n.** for *Delphax pictifrons* Stål p. 7, MUIR & GIFFARD H.S.P.A. Ent. Bull. **15.**

Delphacodes neocclusa **sp. n.** Colorado, *foveata* **var. n.** *subfoveata* Mexico p. 22, *koebelei* Mexico p. 23, *lutulentella* California p. 24, *macateei* Maryland p. 25, *montezumae* Mexico, *nitens* U.S.A. p. 27, *uhleri* Virginia p. 28, *wetmorei* N. America, *balli* Connecticut p. 30, *floridae* Florida and Jamaica p. 33,

crawfordi Mexico p. 34, *bellicosa* California p. 35, *balboae* Mexico p. 36, 4-*spinosa*, *havanae* Central America p. 37, **spp. n.** figs., MUIR & GIFFARD t.c.

Delphax salina **sp. n.** Austria p. 298, HAUPT Konowia **3.**—*D. pictifrons* Stål see *Burnilia.*

Dicranotropis nitida **sp. n.** Austria p. 299, HAUPT Konowia **3.**

Euidella vanduzeei **sp. n.** Florida p. 11 figs., MUIR & GIFFARD H.S.P.A. Ent. Bull. **15.**

Nilaparvata wolcotti **sp. n.** figs. Porto Rico p. 17, MUIR & GIFFARD t.c.

Sogata wallacei Central America p. 13, *pseudoseminigra* Florida p. 15, **spp. n.** fig., MUIR & GIFFARD t.c.

TROPIDUCHIDAE.

Kirongoziella **gen. n.** p. 37, *kunstmanni* **sp. n.** Congo p. 38, SCHMIDT soc. ent. **39.**

Parasthesa oblonga see *Tropiduchodes coleopteratus.*

Tropiduchodes coleopteratus Schmidt (= *Parasthesa oblonga* Melichar) p. 38, SCHMIDT Soc. ent. **39.**

ACHILIDAE.

Tropiphlepsia **gen. n.** *badia* **sp. n.** Brisbane p. 32 fig., MUIR Mem. Queensland Mus. **8.**

DERBIDAE.

Notes on some genera of Derbidae, MUIR Proc. Ent. Soc. Wash. **26** pp. 15–19.

Cedusa key p. 180, *bedusa*, *cedusa* p. 182, *fedusa*, *gedusa* p. 183, *hedusa*, *kedusa*, *ledusa*, U.S.A., *medusa* Honduras p. 184, *pedusa* Mexico, *redusa*, *tedusa*, U.S.A. *vedusa* Mexico p. 185, **spp. n.** fig., MCATEE Ann. Ent. Soc. Amer. **17.**—*C. wolcotti* **sp. n.** Porto Rico p. 462 fig., MUIR Proc. Hawaiian Ent. Soc. **5.**

Cenchrea, key p. 177, *bakeri* Mexico p. 177, *brunnea* Canal Zone, Guatemala & Mexico p. 178, **spp. n.** fig., MCATEE Ann. Ent. Soc. Amer. **17.**

Deribia signoreti see *Raizoda.*

Dysimia **gen. n.** p. 462, *maculata* **sp. n.** West Indies p. 463 fig., MUIR Proc. Hawaiian Ent. Soc. **5.**

Eocenchrea pulla **sp. n.** N. S. W. p. 29, MUIR Mem. Queensland Mus. **8.**

Heronax dubius **sp. n.** Queensland p. 31 fig., MUIR t.c.

Kamendaka longmani **sp. n.** Queensland p. 30, MUIR t.c.; habits p. 40, HACKER Mem. Queensland Mus. **8.**

Paraphenice **gen. n.** for *Phenice neavei* Muir p. 18, MUIR Proc. Ent. Soc. Wash. **26.**

Phenice neavei see *Paraphenice.*

Phantasmatocera pulchella **sp. n.** Queensland p. 29 fig., MUIR Mem. Queensland Mus. **8**; habits p. 40, HACKER Mem. Queensl. Mus. **8.**

Raizoda **gen. n.** for *Deribia signoreti* Coq. p. 19, MUIR Proc. Ent. Soc. Wash. **26.**

EURYBRACHIDAE.

Aspidonitys similis **sp. n.** Congo p. 103, SCHMIDT Ent. Mitt. **13.**

Platybrachys leucostigma early stages p. 37, (= *aerata*) p. 39, *decemmacula* (=*decisa*) p. 40, HACKER Mem. Queensland Mus. **8.**

ISSIDAE.

Asarcopus **gen. n.** p. 91, *palmarum* **sp. n.** Cairo p. 92, HORVÁTH Bull. Soc. R. ent. Egypte **1924.**

Colpoptera brunneus p. 465, *maculifrons* p. 466, **spp. n.** fig. Porto Rico, MUIR Proc. Hawaiian Ent. Soc. **5.**

Fritzrühlia **gen. n.** p. 22, *longifrons* **sp. n.** C. Africa p. 23, SCHMIDT Soc. ent. **39.**

Kiomonia affinis **sp. n.** Congo p. 106, SCHMIDT Ent. Mitt. **13.**

TETTIGOMETRIDAE.

Egropa key p. 94, *davaoensis* p. 95, *fici* p. 96 **spp. n.** Philippines fig., BAKER Phil. J. Sci. **24.**

Mesegropa **gen. n.** p. 98, *sumatrensis* **sp. n.** Sumatra p. 99 fig., BAKER t.c.

Nototettigometra **gen. n.** *breddini* **sp. n.** Peru p. 219 fig., MUIR Ann. Ent. Soc. Amer. **17.**

Raatzbrockmannia **gen. n.** (near *Euphyonarthex*) p. 107, *inclinata* **sp. n.** Congo p. 108, SCHMIDT Ent. Mitt. **13.**

RICANIIDAE.

Epitemna hyalinipennis **sp. n.** Congo p. 109, SCHMIDT Ent. Mitt. **13.**

Gaetulia hackeri Queensland p. 33, *koebelei* N. S. Wales p. 34 **spp. n.**, MUIR Mem. Queensland Mus. **8.**—*G. hackeri* habits p. 41, HACKER t.c.

Paralasonia **gen. n.** p. 35, *australis* **sp. n.** Queensland p. 36 fig., MUIR Mem. Queensland Mus. **8**; habits p. 41, HACKER t.c.

Ricania congoensis **sp. n.** Congo p. 108, SCHMIDT Ent. Mitt. **13.**

†*Scolypopites* **gen. n.** p. 17, *bryani* **sp. n.** Queensland p. 19 fig., TILLYARD Proc. R. Soc. Queensland **35.**

ACANALONIIDAE.

Acanalonia brevifrons **sp. n.** Porto Rico p. 467 fig., MUIR Proc. Hawaiian Ent. Soc. **5.**

Philatis cinerea p. 78, *major* p. 79, **spp. n.** Galapagos, OSBORN Zoologica **5.**

FLATIDAE.

Flatoides brunneus **sp. n.** Santo Domingo p. 472 fig., MUIR Proc. Hawaiian Ent. Soc. **5.**

Flatopsis nivea Sign., characters of varr. *nigropunctata* Stål and *basipunctata* Schmidt p. 295, SCHMIDT Ent. Mitt. **13.**

Gyaria maynéi **sp. n.** Congo p. 295, SCHMIDT t.c.

Gyariella **gen. n.** *kapiriensis* **sp. n.** Congo p. 297, SCHMIDT t.c.

Ormenis pseudomarginata **sp. n.** Porto Rico p. 469 fig., MUIR Proc. Hawaiian Ent. Soc. **5.**

Tetraceratium **gen. n.** p. 467, *wolcotti* **sp. n.** Santo Domingo p. 468 fig., MUIR t.c.

MEMBRACIDAE.

Synopsis of Chilean Membracidae, GODING Rev. chil. Hist. nat. **27** pp. 118–123.

Cyrtolobus synonymy and other notes p. 1, *acuminatus* p. 7, *dixianus* p. 10, *funkhouseri* p. 14, *clarus* p. 16, *auroreus*, p. 22, *pulchellus* p. 29, *parvulus* p. 31, *puritanus* p. 33, *gratiosus* p. 39, *gramatanus* p. 44, *rufulus* (with **var. n.** *ornatulus* p. 50) p. 47, *togatus* p. 52, *flavolatus* p. 54, **spp. n.** N. America figs., WOODRUFF J. N. Y. Ent. Soc. **32.**

Enchenopa andina Colombia, Ecuador, *costaricensis* Costa Rica **spp. n.** p. 293, SCHMIDT Ent. Mitt. **13.**

Ernestopehlkia **gen. n.** (near *Heteronotus*) *inermis, spinosa* **spp. n.** Colombia p. 294, SCHMIDT t.c.

Membracis bipars Ecuador p. 290, *divergens* Costa Rica p. 291, **spp. n.**, SCHMIDT t.c.

Phyllotropis peruana Peru p. 291, *trimaculata* Colombia p. 292 **spp. n.**, SCHMIDT t.c.

CERCOPIDAE.

Cercopis arcuata **f. n.** *haupti* Austria p. 256, PRIESNER Konowia **2** 1923.

Clovia marquardti **sp. n.** Cambodia p. 289, SCHMIDT Ent. Mitt. **13.**

Enderleinia fumipennis **sp. n.** Kamerun p. 289, SCHMIDT t.c.

Eulepyronia **gen. n.** p. 292, *grossa* **sp. n.** Kamerun p. 293, SCHMIDT t.c.

Interocrea Walker transferred from Jassidae to Cercopidae p. 144, CHINA Entomologist **57.**

Ischnorhina williamsi **sp. n.** Ecuador p. 478, LALLEMAND Ann. Mag. N. H. (9) **14.**

Laccogrypota amazonensis **sp. n.** Amazon p. 478, LALLEMAND t.c.

Lepyronia apicata **sp. n.** Congo p. 97, SCHMIDT Ent. Mitt. **13.**

Lepyroniella **gen. n.** type *fasciata* Dist. p. 290, *camerunensis* **sp. n.** Kamerun p. 292, SCHMIDT t.c.

Monecphora williamsi p. 480, *incarnata* p. 482 Ecuador, *laevigata, reducta* Panama p. 481 **spp. n.**, LALLEMAND Ann. Mag. N. H. (9) **14.**

Neolaccogrypota **gen. n.** p. 478, *brunnea* **sp. n.** p. 479 S. America, LALLEMAND t.c.

Pseudaphrophora **gen. n.** *chilensis* **sp. n.** Chile p. 43, SCHMIDT Soc. ent. **39.**

Sphenorhina normandiae p. 482, *ndulata* p. 483, *croceofasciata*, *victoriae* p. 485, *nigrotaenia* p. 486 Ecuador, *modesta* p. 483, *tucurricae* p. 484 Costa Rica **spp. n.**, *rubra* **var. n.** *pallida* p. 484, *rubra* Stål and *sororia* Germ. distinct spp. p. 485, LALLEMAND Ann. Mag. N. H. (9) **14**.

Tomaspis ochraceorosea **sp. n.** Ecuador p. 479, LALLEMAND t.c.

JASSIDAE (CICADELLIDAE).

Notes on Typhlocybinae injurious to vines, BERGEVIN Bull. Soc. Hist. nat. Afr. N. **15** pp. 107–111 fig.

Synonymic notes on Jassidae, CHINA Entomologist **57** pp. 144 & 216.

A translation of the descriptions of various Egyptian species of Jassids described in 1908 and 1910 by Matsumura, DEBSKI Bull. Soc. R. ent. Egypte **1923** 1924 pp. 8–13.

Achrus **gen. n.** (near *Symphypyga*) p. 108, *nigronervosus*, *flavovirens* **spp. n.** Transcaspia p. 110 fig., LINDBERG Not. ent. **4**.

Acocephalus siracusae **sp. n.** Sicily p. 41, MATSUMURA J. Coll. Sci. Tokyo **23** no. 6 1908.

Agallia pepino, *carrotovora* p. 258, *pulchra* p. 259 **spp. n.** Porto Rico, DE LONG & WOLCOTT J. Dept. Agric. P. R. **7**.

Alebra aureovittatus **sp. n.** Porto Rico p. 267 fig., DE LONG t.c.—*A. terminalis* **sp. n.** Bolivia p. 451, OSBORN Ann. Carnegie Mus. **15**.

Athysanus transversalis **sp. n.** Sicily p. 14 fig., MATSUMURA J. Coll. Sci. Tokyo **23** no. 6 1908.

Balclutha mbila **sp. n.** Natal p. 307, NAUDE S. Afr. J. N. H. **4**.

Bythoscopus pallidus p. 388, *nigrifrons* p. 389, **spp. n.** Brazil, OSBORN Ann. Carnegie Mus. **15**.

Carchariacephalus apicalis **sp. n.** Algeria p. 43, MATSUMURA J. Coll. Sci. Tokyo **23** no. 6 1908.

Chiasmus nigricans **sp. n.** Tangiers p. 44, MATSUMURA t.c.

Chlorotettix floridanus **sp. n.** Florida p. 66 fig., DE LONG J. N. Y. Ent. Soc. **32**. —*C. bidentatus* p. 264, *nigromaculatus* p. 265, **spp. n.** Porto Rico fig., DE LONG & WOLCOTT J. Dept. Agric. P. R. **7**.

Cicadula scriptus **sp. n.** Florida p. 67 fig., DE LONG J. N. Y. Ent. Soc. **32**.—*C. maidis* **sp. n.** Porto Rico p. 265 fig., DE LONG & WOLCOTT J. Dept. Agric. P. R. **7**.—*C. viridigrisea* **sp. n.** England p. 54 fig., EDWARDS Ent. Mo. Mag. **60**.—*C. bipunctella*, *flaveola* p. 12, *brevis* p. 13, *tunisiana* p. 14 **spp. n.** Mediterranean district, MATSUMURA J. Coll. Sci. Tokyo **23** no. 6 1908.

Deltocephalus trilobatus, *nigripennis* p. 263 **spp. n.** Porto Rico fig., DE LONG J. Dept. Agric. P. R. **7**.—*D. eburneus* **sp. n.** Mississippi p. 64 fig., DE LONG J. N. Y. Ent. Soc. **32**.—*D. deletus* **n. n.** for *thoracicus* Distant (nec Fieber) p. 367, BAKER Phil. J. Sci. **24**.—*D.*, key to some spp., synonymy of *vitripennis* Flor (nec Marshall) p. 52, *halophilus* **sp. n.** Britain p. 53, EDWARDS Ent. Mo. Mag. **60**.—*D. antennalis* **sp. n.** Austria p. 290 fig., HAUPT Konowia **3**.—*D. haupti* **sp. n.** Sweden p. 40 fig., LINDBERG Not. ent. **4**.—*D. velox* p. 32, *immundus* p. 33, *oranensis* p. 34, *kolosvarensis* p. 35, *sinuatus* p. 36, *nemourensis* p. 37, *capitatus* p. 38, *v-nigrum* p. 39, *littoralis* p. 40 fig. **spp. n.** Mediterranean district, MATSUMURA J. Coll. Sci. Tokyo **23** no. 6 1908.

Dicyphonia picturata **sp. n.** Bolivia p. 403, OSBORN Ann. Carnegie Mus. **15**.

Dikraneura cruentata **varr. n.** *lavata*, *rubricata* p. 75, *mera* **sp. n.** p. 76, Maryland, MCATEE Proc. Ent. Soc. Wash. **26**.—*D. unipuncta* **var. n.** *dorsalis* p. 67 ; *marginatus* **sp. n.** Fla. p. 68 fig., DE LONG J. N. Y. Ent. Soc. **32**.

Doratura stylata in Massachusetts p. 170, BARBER Psyche **31**.

Dorydiella floridana life-cycle, phylogeny pp. 195–198 figs., DE LONG Ohio J. Sci. **24**.

Empoa minutus **sp. n.** Florida p. 68 fig., DE LONG J. N. Y. Ent. Soc. **32**.

Empoasca maligna p. 597, *fabae* p. 598, synonymy, BALL J. Econ. Ent. **17**.—*E. brevidens* p. 269, *sexmaculata* p. 270, **spp. n.** Porto Rico fig., DE LONG J. Dept. Agric. P. R. **7**.—*E. artemisiae* **sp. n.** Austria p. 294, HAUPT Konowia **3**.—*E. picta*, *decorata* **spp. n.** Brazil p. 452, OSBORN Ann. Carnegie Mus. **15**.

Epicephalius **gen. n.** *gracilis* **sp. n.** N. Africa p. 42, MATSUMURA J. Coll. Sci. Tokyo **23** no. 6 1908.

Eremophlepsius **gen. n.** (near *Phlepsius*) p. 127, *rohdendorfi* **sp. n.** p. 128 (with **ab. n.** *marmorata* p. 129) Transcaspia, ZACHVATKIN Ent. Mitt. **13.**

Erythroneura recent bibliography p. 134, *obliqua* **var. n.** *amabilis ; bipunctata* **var. n.** *abluta ; inornata, aprica* p. 132, *pyra* **spp. n.**, *ligata* **var. n.** *caetra* p. 133 U.S.A., MCATEE Proc. Biol. Soc. Wash. **37.**—*E. oculata* Texas p. 39, *mallochi, lunata* p. 41 Illinois **spp. n.**, *ligata* **var. n.** *pupillata* p. 42, *comes* **varr. n.** *palimpsesta, reflecta, rufomaculata* p. 43 U.S.A., *tecta* var. *tecta* McAtee (= *sexpunctata* Malloch) p. 40 MCATEE Bull. Illinois N. H. Surv. **15.**—*E. rosa, kanza, gradata* p. 58, *lawsoni, campora, trivittata* p. 59, *hymac, rubranotum, corni* U.S.A., *ontari* Ontario p. 60, *acuticephala, beameri* p. 61, *omaska* Kansas, *lacta* Ontario **spp. n.**, *vitis* **var. n.** *flava* Minnesota p. 62 ; *irrorata, cherokee* Kansas, *portea* Ontario p. 154, *pulchella, torra, brundusa, fulvocephala* p. 155 (corrected to *xanthocephala* p. 220), *mediana, torella, univittata* **spp. n.**, *tricincta* **var. n.** *rubravitta* p. 156 ; *scripta* p. 290, *aza, rubraza, tudella* p. 291, *fraxa, kanwakae* p. 292, **spp. n.** Kansas, ROBINSON Can. Ent. **56.**—*E. ternaria* **sp. n.** p. 232, *dentata* **subsp. n.** *bilocularis* p. 233 ; *lusoria, coryli* p. 234, *tergemina* p. 235, **spp. n.** California, VAN DUZEE Proc. Cal. Acad. Sci. (4) **13.**—*E. aclys* notes pp. 129–132, WEISS & WEST Ent. News **35.**

Eugnathodus bisinuatus p. 266, *guajanae* p. 267, **spp. n.** Porto Rico fig., DE LONG J. Dept. Agric. P. R. **7.**—*E. lineatus* **sp. n.** Bolivia p. 449, OSBORN Ann. Carnegie Mus. **15.**

Eupteryx britteni **sp. n.** Cumberland p. 54 figs., EDWARDS Ent. Mo. Mag. **60.**

Eutettix mimicus Bolivia p. 414, *reticulatus* Colombia p. 415, **spp. n.**, OSBORN Ann. Carnegie Mus. **15.**

Gnathodus 4-guttatus p. 10, *pallidulus* p. 11 **spp. n.** Mediterranean district, MATSUMURA J. Coll. Sci. Tokyo **23** no. 6 1908.

Goniognathus hyalinus **sp. n.** Egypt p. 99, BERGEVIN Bull. Soc. R. ent. Egypte **1924.**

Goniozygum (*Goniognathus*) *appellans* **n. n.** for *obesus* Distant (nec Jacobi) p. 367, BAKER Phil. J. Sci. **24.**

Huleria rugosa, p. 404, *affinis* p. 405, **spp. n.** Bolivia, OSBORN Ann. Carnegie Mus. **15.**

Idiocerus kirschbaumi **n. n.** for *cupreus* Kirsch (nec Walk.), *incertus* **n. n.** for *maculatus* Dist. (nec Mel.) p. 367, BAKER Phil. J. Sci. **24.**—*I. taxodium* **sp. n.** Florida p. 63 fig., DE LONG J. N. Y. Ent. Soc. **32.**—*I. bipunctatus* **sp. n.** Transcaspia p. 107, LINDBERG Not. ent. **4.**—*I. latifrons, brunneipennis* **spp. n.** Hungary p. 45, MATSUMURA J. Coll. Sci. Tokyo **23** no. 6 1908.—*I. occipitalis* p. 390, *albicollis, eburneomaculatus* p. 391 Brazil, *costalis* Bolivia, *breviatus* Brazil p. 392, *flavocinctus* Fr. Guiana, *principensis* Brazil p. 393, *exquisitus, figuratus* Brazil, *flammeus* Bolivia p. 394, *vittatus* Brazil, *fulvocinctus* Bolivia p. 395, *rugifrons* Br. Guiana p. 396, **spp. n.** fig., OSBORN Ann. Carnegie Mus. **15.**

Interocrea Walker transferred to Cercopidae p. 144, CHINA Entomologist **57.**

Jassus nemourensis **sp. n.** N. Africa p. 28, MATSUMURA J. Coll. Sci. Tokyo **23** no. 6 1908.—*J. ensiger* p. 435, *ferruginosus* p. 436 Brazil, *brunneus* Fr. Guiana, *fascifrons* Brazil p. 437, *spinosus* Br. Guiana p. 438, *dentatus*, Brazil p. 439, *interruptus* Bolivia p. 441, *pallidus* Brazil, *ampliatus* Bolivia p. 442, *foveatus* Brazil, *loricatus* Bolivia p. 443, *carinatus* Brazil p. 444, *dubius* p. 445, *cinnamomeus* Bolivia, *triangularis* Brazil p. 446, *bisinuatus* Brazil, *tubus* Fr. Guiana p. 447, *flavifrons* Bolivia p. 448, **spp. n.**, OSBORN Ann. Carnegie Mus. **15.**—*J. galapagoensis* **sp. n.** Galapagos p. 77, OSBORN Zoologica **5.**

Ledra aurita synonymy p. 252, ROYER Bull. Soc. ent. Fr. **1923.**

Lonatura bicolor **var. n.** *melleus* p. 64 Florida, DE LONG J. N. Y. Ent. Soc. **32.**

Makilingia key p. 58, *tettigonoides* p. 60, *speciosa* p. 61, *sibuyanensis* p. 62, *variabilis* p. 63, *banahaoensis* p. 64, *haightiana, lineata* p. 65, *surigaoensis, panayensis* p. 66, *bimaculata* p. 67, *woodworthi* p. 68, *costalis, frontalis* p. 69, **spp. n.** Philippines, BAKER Phil. J. Sci **24.**

Megulopa **gen. n.** p. 106, *sahlbergorum* **sp. n.** Egypt p. 107 fig., LINDBERG Not. ent. **4.**

Melicharella decora **sp. n.** Transcaspia p. 111 fig., LINDBERG Not. ent. **4.**

Neocoelidia tumidifrons **var. n.** *vittapennis* p. 66 Florida, DE LONG J. N. Y. Ent. Soc. **32.**—*N. ornata* **sp. n.** Colombia p. 449, OSBORN Ann. Carnegie Mus. **15.**

Nionia major, gagatina (with **var. n.** *brunnea* p. 402) p. 401, *minor* p. 402, **spp. n.** Bolivia, OSBORN Ann. Carnegie Mus. **15.**

Penthimia distanti **n. n.** for *nitida* (nec Leth.) p. 367, BAKER Phil. J. Sci. **24.**

Platyproctus **gen. n.** (near *Melicharella*) *tessellatus* p. 112, *flaveolus* p. 113, **spp. n.** Transcaspia, LINDBERG Not. ent. **4.**

Pogonoscopus **gen. n.** p. 529, *myrmex* **sp. n.** Australia p. 530 figs., CHINA Ann. Mag. N. H. (9) **14.**

Scaphoideus bimarginatus **sp. n.** Porto Rico p. 261 fig., DE LONG J. Dept. Agric. P. R. **7.**—*S. egyptiacus* Egypt p. 29 fig., *horváthi* N. Africa p. 30 **spp. n.**, MATSUMURA J. Coll. Sci. Tokyo **23** no. 6 1908.—*S. ineffectus* **n. n.** for *tessellatus* Dist. (nec Osb.) p. 367, BAKER Phil. J. Sci. **24.**

Symphypyga obsoleta **var. n.** *infuscata* Transcaspia p. 108, LINDBERG Not. ent. **4.**

Thamnotettix andropogonis Austria p. 291, *rubropunctatus* Germany p. 292, *dissimilis* Austria p. 293, **spp. n.**, HAUPT Konowia **3.**—*T. montivagus* **n. n.** for *montanus* Mats. (nec Van Duzee), *placatus* **n. n.** for *placidus* Osb. (nec Horv.) p. 367, BAKER Phil. J. Sci. **24.**—*T. perspicillata* **var. n.** *rubralineus* p. 64; *planus* **sp. n.** p. 65 fig. Fla., DE LONG J. N. Y. Ent. Soc. **32.**—*T. egyptiacus, lineatopunctatus* p. 16, *siciliensis* p. 17, *dubiosus* p. 18, *minutissimus, rostralis* p. 19, *liberatus* p. 20, *salus* p. 21, *ignavus* p. 22, *oranensis* p. 23, *nemourensis* (with **var. n.** *maculipennis*) p. 24, *tangericus* p. 25, *albovaria* p. 26, *acuminatus* p. 27, **spp. n.** Mediterranean district figs., MATSUMURA J. Coll. Sci. Tokyo **23** no. 6 1908.—*T. altus* p. 417, *fuscipennis* p. 419, *clypeatus* p. 420 Bolivia, *chapadensis* Brazil p. 423, *magnificus* Bolivia p. 424, *luteus* Uruguay, *venatus* Bolivia p. 425, **spp. n.**, OSBORN Ann. Carnegie Mus. **15.**

Typhlocyba rosea synonymy p. 596, BALL J. Econ. Ent. **17.**—*T. alnicola* p. 54, *nigriloba, spinigera* p. 55, **spp. n.** England figs., EDWARDS Ent. Mo. Mag. **60.**—*T. clavalis, fulguralis* p. 3, *serpentina* p. 4, *nigricostalis* p. 5, *fiumensis* p. 6, *nigridorsalis* p. 7, *unipuncta, tangerica* p. 8, *algerica* p. 9 **spp. n.** Mediterranean district, MATSUMURA J. Coll. Sci. Tokyo **23** no. 6 1908.

Ulopa intermedia **sp. n.** Germany p. 285, HAUPT Konowia **3.**

Wolfella ensiformis Principe p. 97, *ensifer* Fernando Po p. 97, **spp. n.**, SCHMIDT Ent. Mitt. **13.**—*W. rühli* **sp. n.** Tropical Africa p. 21, SCHMIDT Soc. ent. **39.**

Xestocephalus irroratus **sp. n.** Bolivia p. 400, OSBORN Ann. Carnegie Mus. **15.**

Zygina concinna, pruni p. 56, *pallidifrons* p. 57, **spp. n.** England, EDWARDS Ent. Mo. Mag. **60.**

PSYLLIDAE.

The Bishop Museum collection of Psyllidae, CRAWFORD Proc. Hawaiian Ent. Soc. 1923 **5** pp. 369–370.

List of Psyllidae from India and Ceylon, RAMAKRISHNA AYYAR Rec. Ind. Mus. **26** pp. 621–625.

Aphalara martini **sp. n.** California p. 22, VAN DUZEE Pan-Pacific Ent. **1**; nymph p. 25 fig., FERRIS t.c.

Arytaina ramakrishni **sp. n.** India p. 618 fig., CRAWFORD Rec. Ind. Mus. **26.**

Diaphorina cardiae India, *truncata* India, S. China, **spp. n.** p. 617 fig., CRAWFORD t.c.

Dynopsylla key, *grandis* **sp. n.** India p. 619 fig., CRAWFORD t.c.

Kuwayama lavaterae **sp. n.** California p. 22, VAN DUZEE Pan-Pacific Ent. **1**; nymph p. 24 fig., FERRIS t.c.

Trioza buxtoni **sp. n.** Palestine p. 247, LAING Bull. Ent. Res. **14.**

APHIDAE.

Preliminary list of Aphididae of British Columbia, GLENDENNING Proc. Br. Columbia Ent. Soc. **21** pp. 40–43.

A taxonomic, ecologic and economic study of Ohio Aphididae, GUYTON Ohio J. Sci. **24** pp. 1–30.

Monograph of Russian Aphididae with keys to species and sub-species, MORDVILKO Faune Russ. Hemipt. **1** 1919 pp. 237–508.

Keys to genera of Eriosomea, MORDVILKO Trans. Dept. App. Ent. **12** no. 3 110 pp. fig.

Aphids with branched cornicles, PATCH Ent. News **35** pp. 331–332 3 figs.

Aphididae of Formosa (part 3), TAKAHASHI Govt. Res. Inst. Taihoku 1924 121 pp. 10 pls.

Some Aphididae of the Far East, TAKAHASHI Phil. J. Sci. **24** pp. 711–717.

On the nymphs of the Aphidinae, TAKAHASHI Proc. Ent. Soc. Wash. **26** pp. 1–11.

Notes on Hawaiian Aphidae with list of food-plants, TIMBERLAKE Proc. Hawaiian Ent. Soc. 1923 **5** pp. 450–460.

Acyrthosiphon rjabushinskii **sp. n.** Kamchatka p. 244, (*Amphorophora*) *rubi* **subspp. n.** *zhuravlevi* Uralsk p. 265, *amurense* Amur district p. 267, *Metopolophium* **subgen. n.** for *dirhodum* Wlk. p. 270, *graminearum* **sp. n.** Russia p. 291 fig., MORDVILKO Faune Russ. Hemipt. **1** 1919.

Adelges tsugae **sp. n.** Oregon and California p. 79 fig., ANNAND Pan-Pacific Ent. **1.**

Aiceona osugii **sp. n.** Formosa p. 76 fig., TAKAHASHI Aphididae of Formosa **3.**

Aleurodaphis blumeae (= *Astegopteryx japonica*) p. 717, TAKAHASHI Phil. J. Sci. **24.**

Anameson **gen. n.** p. 336, *kamtschaticum* **sp. n.** Kamchatka p. 337 fig., MORDVILKO Faune Russ. Hemipt. **1** 1919.

Anoecia graminis p. 3, *setariae* p. 4, **spp. n.** Colorado, GILLETTE & PALMER Ann. Ent. Soc. Amer. **17.**

Anuraphis artemisiae **sp. n.** Formosa p. 46 fig., TAKAHASHI Aphididae of Formosa **3.**—*A. cynariella, rumicella* **spp. n.** Britain p. 125 figs., THEOBALD Ent. Mo. Mag. **60.**

Aphis petasiticola **sp. n.** Formosa p. 42 fig., TAKAHASHI Aphididae of Formosa **3.**—*A. compositellae* Wales p. 126, *dallmani* England p. 129, **spp. n.** fig., THEOBALD Ent. Mo. Mag. **60.**

Aploneura lentisci biology p. 107, GRANDI Atti Acc. Lincei **30** 1921.

Astegopteryx kashifolia **sp. n.** pp. 14–15, 92–93, 126–127 Japan, UYE Insect World **28.**—*A. japonica* see *Aleurodaphis blumeae.*

Cerataphis formosanus **sp. n.** Formosa p. 90 fig., TAKAHASHI Aphididae of Formosa **3.**

Chermes armiger **sp. n.** Idaho p. 5, ANNAND Can. Ent. **56.**

Cinacium **gen. n.** *iaksuiense* **sp. n.** Japan pp. 472–474, KISHIDA Dobuts. Zasshi **36.**

Ctenocallis **gen. n.,** *dobrovljanskyi* **sp. n.** Kiev p. 61, KLODNITZKI Trans. 4th All-Russ. Ent.-Phytopath. Mtg. Moscow **1922.**

Dilachnus quercihabitans **sp. n.** Korea p. 716, TAKAHASHI Phil. J. Sci. **24.**—*D. formosanus* **sp. n.** Formosa p. 73 fig., TAKAHASHI Aphididae of Formosa **3.**

Eriosoma, early stages of various species, pp. 46–55, MARCHAL Rev. Path. vég. & Ent. agric. **11.**—*E. ulmi* bionomics pp. 33–40 fig., GLENDENNING Proc. Ent. Soc. Br. Columbia no. **21.**—*E. clematicola* **sp. n.** Formosa p. 99 fig., TAKAHASHI Aphididae of Formosa **3.**

Essigella hoerneri p. 5, *fusca* p. 6, **spp. n.,** Colorado, GILLETTE & PALMER Ann. Ent. Soc. Amer. **17.**

Kurisakia **gen. n.** *juglandicola* **sp. n.** Japan p. 715, TAKAHASHI Phil. J. Sci. **24.**

Lachnus sabinae p. 9, *sibericae* p. 12, *splendens* p. 14, *solitarius* p. 17, *terminalis* p. 19, *hottesi* p. 22, *similis* p. 23, *murrayanae* p. 26, *brevispinosus* p. 27, *flexilis* p. 30, *apini* p. 31, *glabra* p. 35, *ater* p. 37, *pulverulens* p. 40, **spp. n.** Colorado fig., GILLETTE & PALMER Ann. Ent. Soc. Amer. **17.**

Macrosiphum rosae **subspp. n.** *orientale* Vladivostok p. 451, *vasiljevi* China p. 453; *vereshtshagini* Tomsk p. 480, *rushkovskii* Caucasus, Ufa p. 483, *nasonovi* Finland p. 493, *incertum* Russia p. 501, *melampyri* Russia p. 502, **spp. n.**; *funestum* **subsp. n.** *shelkovnikovi* Transcaucasia p. 506, MORDVILKO Faune Russ. Hemipt. **1** 1919.—*M. smilacicola* p. 15, *perillae* p. 25 Formosa, *esakii, smilaceti* Japan p. 101, **spp. n.** fig., TAKAHASHI Aphididae of Formosa **3**.—*M. galiophagum* **sp. n.** Kent p. 62 figs., WIMSHURST Ent. Mo. Mag. **60**.

Megoura viciae **subspp. n.** *abchasica* Transcaucasia p. 326, *crassicauda* S. Ussuri p. 237 fig., MORDVILKO Faune Russ. Hemipt. **1** 1919.

Metopolophium **subgen. n.** see *Acyrthosiphon*.

Myzocallis formosanus **sp. n.** Formosa p. 64 fig., TAKAHASHI Aphididae of Formosa **3**.

Myzus rhois **sp. n.** Japan p. 102, TAKAHASHI t.c.—*M. vaccinii, molluginella* **spp. n.** Britain p. 128 figs., THEOBALD Ent. Mo. Mag. **60**.

Neoamphorophora **gen. n.** *kalmiae* **sp. n.** Maine p. 49 fig., MASON Proc. Ent. Soc. Wash. **26**.

Oregma key to Formosan p. 78, *alexanderi* p. 81, *pseudomontana* p. 82, *koshunensis* p. 84, *formosana* p. 88, *oplismeni* p. 89 Formosa, *japonica* p. 116 Japan, **spp. n.** fig., TAKAHASHI Aphididae of Formosa **3**.—*O. quanici* pp. 14, 92, *lanigera* p. 126, **spp. n.** Japan, UYE Insect World **28**.

Paczoskia **gen. n.** p. 330, *paczoskii* **sp. n.** Russia p. 331 fig., MORDVILKO Faune Russ. Hemipt. **1** 1919.

Patchia spiraeae **sp. n.** Japan p. 114 fig., TAKAHASHI Aphididae of Formosa **3**.

Phylloxera, Börner's species and theory of immunity sep. pp. 1–7, BAUER Weinb. u. Kellerwirtsch. **3**.

Stomaphis longirostris redescribed p. 136, DONISTHORPE Ent. Rec. **36**.

Termitaphis see Termitocoridae.

Unilachnus orientalis **sp. n.** Formosa p. 74 fig., TAKAHASHI Aphididae of Formosa **3**.

ALEURODIDAE.

Aleyrodes ricini **sp. n.** India p. 131, MISRA Proc. 5th Ent. Mtg. Pusa 1923 **1924**.

COCCIDAE.

The Coccidae of Palestine, BODENHEIMER Zionist Organis. Inst. Agric. and N. H. Bull. **1** 100 pp. 12 pls. 45 figs.

The name of the lac insects, COCKERELL Psyche **31** pp. 47–48.

Biology and anatomy of various European Coccidae, DINGLER Zs. angew. Ent. **10** pp. 364–386 fig.

Coccidae of Japan, KUWANA Insect World **28** pp. 3–4, 39–43, 110–112 etc.

Notes on the German Coccidae, LINDINGER Ent. Jahrb. **32** 1923 pp. 138–152.

Coccidae in Central European greenhouses, LINDINGER Ent. Jahrb. **33–34** pp. 167–191.

Muscular system of Lecaniinae, TEODORO Redia **15** pp. 177–179.

Alecanopsis key, *tenuis* p. 41, *mirus* p. 42, *grandis* p. 44, Australia, **spp. n.** fig., GREEN Bull. Ent. Res. **15**.

Alichtensia orientalis **sp. n.** Uruguay p. 105 fig., LAHILLE Uruguay Bol. Mens. **5**.

Aspidiotus aharonii p. 23, *herzlianus* p. 30, **spp. n.** Palestine fig., BODENHEIMER Zionist Organis. Inst. Agric. & N. H. Bull. **1**.

Aspidoproctus mimeuri **sp. n.** Dakar p. 31 fig., VAYSSIÈRE Bull. Soc. ent. Fr. **1924**.

Asterolecanium charmoyi **sp. n.** Mauritius p. 45 fig., GREEN Bull. Ent. Res. **15**.

Aulacaspis major Ckll. (= *flacourtiae* Ruth.) from *Chionaspis, rutherfordi* **n. n.** for *major* Ruth. p. 232, MORRISON Proc. Ent. Soc. Wash. **26**.

Ceronema grandis **sp. n.** Kenya p. 417 fig., GREEN & LAING Bull. Ent. Res. **14**.

Chionaspis engeddensis **sp. n.** Palestine p. 40 fig., BODENHEIMER Zionist Organis. Inst. Agric. & N. H. Bull. **1**.—*C. major* see *Aulacaspis*.

Eriococcus papillosus **sp. n.** Galapagos p. 145 fig., MORRISON Zoologica **5**.

Filippia oleac wax-glands p. 179, TEODORO Redia **15**.

Geococcus citrinus **sp. n.** Japan p. 51 fig., KUWANA Imp. Pl. Quar. Sta. Japan Bull. **3** 1923.

Lacciferidae **n. n.** for Tachardiidae Ferris p. 47, COCKERELL Psyche **31**.

Lecanium (*Eulecanium*) *racheli* **sp. n.** Palestine p. 68 fig., BODENHEIMER Zionist Organis. Inst. Agric. & N. H. Bull. **1**.—*L. jaculator* Br. Guiana p. 418, (*Akermes*) *colae* Gold Coast p. 419, **spp. n.** fig., GREEN & LAING Bull. Ent. Res. **14**.

Lepidosaphes palaestinensis p. 50, (*Coccomytilus*) *zlocistii* p. 54, **spp. n.** Palestine fig., BODENHEIMER Zionist Organis. Inst. Agric. & N. H. Bull. **1**.—*L. intermittens* **sp. n.** Egypt p. 7 fig., HALL Min. Agric. Egypt Bull. **46**.

Margarodes hirsutissimus **sp. n.** Egypt p. 1 fig., HALL t.c.—*M. similis* **sp. n.** Galapagos p. 143 fig., MORRISON Zoologica **5**.

Monophlebus philippinensis **sp. n.** Philippines p. 2 fig., GREEN Not. ent. **4**.—*M. suaedae* **sp. n.** Tunisia p. 29 fig., VAYSSIÈRE Bull. Soc. ent. Fr. **1924**.

Orthezia yasushii **sp. n.** Japan p. 58 fig., KUWANA Imp. Pl. Quar. Sta. Japan Bull. **3** 1923.—*O. arenariae* **sp. n.** Morocco p. 28 fig., VAYSSIÈRE Bull. Soc. ent. Fr. **1924**.

Orthezinella **gen. n.** *hispanica* Spain p. 170, *neotropicalis* Costa Rica p. 172 **spp. n.** figs., SILVESTRI Bol. Soc. Esp. Hist. nat. **24**.

Ortheziola tristani **sp. n.** Costa Rica p. 174 fig., SILVESTRI Bol. Soc. Esp. Hist. nat. **24**.

Parlatoria judaica **sp. n.** Palestine p. 59 fig., BODENHEIMER Zionist Organis. Inst. Agric. & N. H. Bull. **1**.

Phenacoccus parvus p. 147, *galapagoensis* p. 148, *insularis* p. 150, **spp. n.** Galapagos fig., MORRISON Zoologica **5**.

Pseudococcus lindingeri **sp. n.** Palestine p. 81 fig., BODENHEIMER Zionist Organis. Inst. Agric. & N. H. Bull. **1**.—*P. tirolensis* **sp. n.** Tyrol p. 387 fig., DINGLER Zs. angew. Ent. **10**.—*P. cimensis* **n. n.** for *artemisiae* p. 48, GREEN Bull. Ent. Res. **15**.—*P. vitiensis* Fiji p. 415, *grenadensis* Grenada p. 416, **spp. n.** fig., GREEN & LAING Bull. Ent. Res. **14**.—*P. variabilis* **sp. n.** Egypt p. 5 fig., HALL Min. Agric. Egypt Bull. **46**.—*P. maritimus* parasites pp. 223–292 figs., TIMBERLAKE & CLAUSEN Univ. Cal. Pubns. Ent. **3**.

Rhizoecus kondonis **sp. n.** Japan p. 55 fig., KUWANA Imp. Pl. Quar. Sta. Japan Bull. **3** 1923.

Ripersia exul Guernsey p. 46, *longisetosa* S. Africa p. 47, **spp. n.** fig., GREEN Bull. Ent. Res. **15**.

Stictococcus anonae **sp. n.** Tanganyika p. 415 fig., GREEN & LAING Bull. Ent. Res. **14**.

Tachardia lacca notes p. 118, MORSTATT Naturwissenschaften **12**.

Tachardiidae see Lacciferidae.

Trionymus polyporus **sp. n.** Egypt p. 6 fig., HALL Min. Agric. Egypt Bull. **46**.—*T. hypolithus* **sp. n.** Colorado p. 353 fig., SHOTWELL Ann. Ent. Soc. Amer. **17**.

Xenococcus **gen. n.** p. 311, *annandalei* **sp. n.** Madras p. 312 fig., SILVESTRI Rec. Ind. Mus. **26**.

THYSANOPTERA.

Notes on some British Thysanopterai BAGNALL Ent. Mo. Mag. **60** p. 113.

Keys to families and sub-families of Aeolothripidae, BAGNALL Ent. Mo. Mag. **60** p. 9.

Notes on synonymy of von Schlechtendal's fossil Thysanoptera, BAGNALL Ann. Mag. N. H. (9) **14** p. 156.

Male genital armature of Thysano ptera, DE GRYSE & TREHERNE Can. Ent. **56** pp. 177–182 1 pl.

Catalogue of Thysanoptera of Hungary, JABLONOWSKI Fauna Regn, Hung. Thysanop. 1918 pp. 17–18.

Thysanoptera known to occur in Canada, TREHERNE Can. Ent. **56** pp. 82–88.

Winter quarters of European Thysan ptera, PRIESNER Ent. Jahrb. **33–34** pp. 151–162.

On a collection of Thysanoptera from Honduras, WATSON & HUBBELL Florida Ent. **7** pp. 60–62.

Acanthothrips magnafemoralis see *Neurothrips.*

Aeolothrips notes and synonymy of certain spp. p. 113, *propinquus* **sp. n.** Surrey p. 269, BAGNALL Ent. Mo. Mag. **60.**—*A. nobilis* **ab. n.** *mülleri* Upper Austria p. 51, PRIESNER Jahresb. Oberöst. Musealver. **78** 1920.

†*Amorphothrips* **gen. n.** *klebsi* **sp. n.** Baltic amber p. 252, BAGNALL Ent. Mo. Mag. **60.**

†*Anaphothrips perspicuus* **sp. n.** Baltic amber p. 140, PRIESNER Ent. Mitt. **13.**—*A. gracillimus* **sp. n.** Austria p. 82, PRIESNER Konowia **2** 1923.—*A. ferrugineus* **ab. n.** *adustus* Upper Austria p. 53, PRIESNER Jahresb. Oberöst. Musealver. **78** 1920.

Ankothrips key p. 66, *diffractus* **sp. n.** New Mexico p. 67, HOOD Bull. Brooklyn Ent. Soc. **19.**

Archaeolothrips **gen. n.** *fontis* **sp. n.** Australia p. 627, BAGNALL Ann. Mag. N. H. (9) **14.**

†*Archaeothrips* **gen. n.** p. 137, *latipennis* **sp. n.** Baltic amber p. 138 fig., PRIESNER Ent. Mitt. **13.**

†*Archankothrips* **gen. n.** *pugionifer* **sp. n.** Baltic amber p. 132 fig., PRIESNER Ent. Mitt. **13.**

Arrhenothrips see *Mesothrips.*

Bregmatothrips iridis **sp. n.** Holland p. 253, WATSON Ent. Mo. Mag. **60.**

Cephalothrips hispanicus see *Malacothrips.*

Chonothrips **subgen. n.** see *Zygothrips.*

Coenothrips **gen. n.** *fallax* **sp. n.** Australia p. 629, BAGNALL Ann. Mag. N. H. (9) **14.**

Compsothrips recticeps **sp. n.** Transvaal p. 293, HOOD Psyche **31.**—*C. linearis, reuteri* see *Liothrips.*

Dendrothrips bispinosus **sp. n.** India p. 455, BAGNALL Bull. Ent. Res. **14.**

Desmothrips obsoletus **sp. n.** Australia p. 626, BAGNALL Ann. Mag. N. H. (9) **14**

Diceratothrips Bagn. (=*Eulophothrips* Schmutz) p. 632, BAGNALL Ann. Mag. N. H. (9) **14.**

Elaphrothrips parallelus **sp. n.** Florida p. 315, HOOD Ent. News **35.**

†*Electrothrips* **gen. n.** p. 251, *hystrix* **sp. n.** Baltic amber p. 252, BAGNALL Ent. Mo. Mag. **60.**

†*Eocephalothrips* **gen. n.** type *Thrips capito* Schl. p. 161, BAGNALL Ann. Mag. N. H. (9) **14.**

Euchaetothrips ingens, biology and development pp. 1–5 fig., AHLBERG Ent. Tidsk. **45**; ♂ described p. 273, BAGNALL Ent. Mo. Mag. **60.**

Eulophothrips see *Diceratothrips.*

Euthrips manihoti **sp. n.** Brazil p. 216 fig., BONDAR Chacaras e Quintaes **30.**

Frankliniella tristis **sp. n.** Upper Austria p. 56, PRIESNER Jahresb. Oberöst. Musealver. **78** 1920.—*F. intonsa* **var. n.** *maritima* Spiekeroog Island (North Sea) p. 165, PRIESNER Ent. Jahrb. **33–34.**—*F. nubila* **sp. n.** Br. Columbia p. 84, TREHERNE Can. Ent. **56.**

Franklinothrips myrmicaeformis **sp. n.** Bengasi p. 91 fig., ZANON Atti Pont. Accad. Nuovi Lincei **77.**

Haplothrips statices Hal. a good sp. p. 274, BAGNALL Ent. Mo. Mag. **60.**—*H.,* key, *robiniae* **sp. n.** p. 49 Hungary, PRIESNER Ent. Zs. **37.**—*H. knechteli* **sp. n.** Bukarest p. 84, PRIESNER Konowia **2** 1923.

†*Heliothrips scudderi* **sp. n.** Baltic amber p. 131, BAGNALL Ent. Mo. Mag. **60.**

†*Hemithrips setosus* p. 158, *parallelicornis, schlechtendali* p. 159, *thoracicus* p. 160 **spp. n.** Siebengebirge, Germany, BAGNALL Ann. Mag. N. H. (9) **14.**

†*Homothrips physothripoides* **sp. n.** Baltic amber p. 131, BAGNALL Ent. Mo. Mag. **60.**

Hystricothripoides **gen. n.** (near *Leeuwenia*) *karnyi* **sp. n.** Sumatra p. 9 fig., FULMEK Treubia **6.**

Leeuwenia coriaceus from *Panurothrips, eugeniae* **sp. n.** India p. 640, BAGNALL Ann. Mag. N. H. (9) **14.**

Limothrips key to ♀♀ p. 270, BAGNALL Ent. Mo. Mag. **60.**—*L.*, notes on American, pp. 231–232 fig., HERRICK Ann. Ent. Soc. Amer. **17.**—*L. denticornis* **ab. n.** *adustus* Upper Austria p. 52, PRIESNER Jahresb. Oberöst. Musealver. **78** 1920.

Liothrips linearis and *reuteri* from *Compsothrips, karnyi* **n. n.** for *reuteri* Karny p. 631, BAGNALL Ann. Mag. N. H. (9) **14.**

Malacothrips lewisi from *Trichothrips, hispanicus* from *Cephalothrips* p. 635, BAGNALL Ann. Mag. N. H. (9) **14.**

Melanothrips key p. 10, *angusticeps* **sp. n.** England p. 11, BAGNALL Ent. Mo. Mag. **60.**

†*Merothrips fritschi* **sp. n.** Baltic amber p. 145 fig., PRIESNER Ent. Mitt. **13.**

Mesothrips (=*Arrhenothrips* Hood) p. 635, *brevis* p. 636, *angusticornis* p. 638 Ceylon, *froggatti* p. 637, *insolens* p. 638 Australia, *karnyi* p. 639 India **spp. n.**, BAGNALL Ann. Mag. N. H. (9) **14.**

†*Necrothrips* **gen. n.**, *nanus* **sp. n.** Baltic amber p. 147 fig., PRIESNER Ent. Mitt. **13.**

Neoheegeria lederi **sp. n.** Turkestan p. 2, PRIESNER Konowia **3.**

Neurothrips **gen. n.** (near *Acanthothrips*) type *A. magnafemoralis* Hinds p. 315, HOOD Ent. News **35.**

Odontothrips anisomerus, mutabilis **spp. n.** Britain p. 271, BAGNALL Ent. Mo. Mag. **60.**—*O. aemulans* Rumania, *karnyi* Sudan p. 1, **spp. n.**, PRIESNER Konowia **3.**

Oedemothrips propiquus **varr. n.** *breviceps, obscuricornis* New Zealand p. 634, BAGNALL Ann. Mag. N. H. (9) **14.**

†*Opadothrips* **gen. n.** *fritschianus* **sp. n.** Baltic amber p. 133 fig., PRIESNER Ent. Mitt. **13.**

Oxythrips halidayi **sp. n.** Britain p. 272, BAGNALL Ent. Mo. Mag. **60.**—†*O. sepultus* **sp. n.** Baltic amber p. 141 fig., PRIESNER Ent. Mitt. **13.**

Panurothrips coriaceus see *Leeuwenia.*

Phloeothrips pillichianus **sp. n.** p. 2 Hungary, PRIESNER Ent. Zs. **38.**—*P. maculatus* see *Stictothrips.*

Phrasterothrips brasiliensis p. 632, *omer-cooperi, affinis* p. 633, **spp. n.** Brazil, BAGNALL Ann. Mag. N. H. (9) **14.**

†*Physothrips gracilicornis, succineus* p. 132, *clavicornis, connaticornis* p. 133, **spp. n.** Baltic amber, BAGNALL Ent. Mo. Mag. **60.**

Platythrips badius **sp. n.** Siberia p. 142, JOHN Ann. Mag. N. H. (9) **13.**—*P. tunicatus* **f. n.** *macroptera* Upper Austria p. 57, PRIESNER Jahresber. Oberöst. Musealver. **78** 1920.

Plectothrips atactus **sp. n.** Transvaa p. 298, HOOD Psyche **31.**

†*Praedendrothrips* **gen. n.** *avus* **sp. n.** Baltic amber p. 139 fig., PRIESNER Ent. Mitt. **13.**

†*Procerothrips* **gen. n.** *cylindricornis* **sp. n.** Baltic amber p. 252, BAGNALL Ent. Mo. Mag. **60.**

†*Proleeuwenia* **gen. n.**, *succini* **sp. n.** p. 148 amber fig., PRIESNER Ent. Mitt. **13.**

†*Protothrips* **gen. n.**, *speratus* **sp. n.** Baltic amber p. 136 fig., PRIESNER Ent. Mitt. **13.**

Rhaphidothrips longistylosus **f. n.** *hemimacroptera* Upper Austria p. 54, PRIESNER Jahresb. Oberöst. Musealver. **78** 1920.

Rhipidothrips kellyanus **sp. n.** Australia p. 584, BAGNALL Ann. Mag. N. H. (9) **13.**

Rhynchothrips key, *hungaricus* **sp. n.** Hungary, p. 52, PRIESNER Ent. Zs. **3**

Scirtothrips longipennis, description of larva p. 21 fig., AHLBERG Medd. Centralanst. Försöks. Jordbruk. no. **263.**

†*Selenothrips cordatus* **sp. n.** Baltic amber p. 131, BAGNALL Ent. Mo. Mag. **60.**

Sericothrips gracilipes **sp. n.** Mexico p. 149, HOOD Can. Ent. **56.**—*S. nubilipennis* p. 312, *sambuci* p. 313, **spp. n.** U.S.A., HOOD Ent. News **35.**

Stictothrips **gen. n.** (near *Neurothrips*) type *Phloeothrips maculatus* Hood, *faurei* **sp. n.** Transvaal p. 295, HOOD Psyche **31.**

†*Symphyothrips longicauda* **sp. n.** Baltic amber p. 150, PRIESNER Ent. Mitt. **13.**

Taeniothrips inconsequens Uzel ♂ p. 271, BAGNALL Ent. Mo. Mag. **60.**—*T. frontalis* **f. n.** *macroptera, pilosus* **f. n.** *macroptera* p. 54, *atratus* **var. n.** *montanus, inconsequens* **ab. n.** *adustus, primulae* **f. n.** *brevicornis* p. 55 Upper Austria, PRIESNER Jahresb. Oberöst. Musealver. **78** 1920.—*T. ericae,* redescription of larva p. 40 fig., PRIESNER in DAMPF Sitz. naturf. Ges. Univ. Dorpat **31.**—†*T. repositus* p. 142, *resinae* p. 144, **spp. n.** Baltic amber fig., PRIESNER Ent. Mitt. **13.**—*T. orionis* p. 86, *lemanis* p. 87, **spp. n.** Br. Columbia fig., TREHERNE Can. Ent. **56.**

Tetraceratothrips **gen. n.** *agrestis* **sp. n.** Australia p. 628, BAGNALL Ann. Mag. N. H. (9) **14.**

Teuchothrips hoodianus **sp. n.** Australia p. 630, BAGNALL t.c.

Thrips fuscipennis larva and nymph p. 17, *nigropilosus* nymph p. 20, *angusticeps* larva p. 22 figs, AHLBERG Medd. Centralanst. Försöks. Jordbruk no. **263.**—*T. pallidulus* **sp. n.** India p. 424, BAGNALL Ann. Mag. N. H. (9) **13.**—*T. euphorbiae* p. 115, *funebris* **spp. n.** England, *euphorbiicola* **n. n.** for *euphorbiae,* Bagn. (nec Knecht.) p. 274, BAGNALL Ent. Mo. Mag. **60.**—*T. mariae* **sp. n.** Maritime Alps p. 2, COTTE Mém. Soc. linn. Provence **3.**—*T. montivagus,* **sp. n.** Austria p. 83, PRIESNER Konowia **2** 1923.—*T. pillichi* **sp. n.** (with **f. n.** *fallaciosa*) Hungary p. 2, PRIESNER Konowia **3.**—*T. physapus* **ab. n.** *obscuricornis* p. 57, *praetermissus* **sp. n.** p. 58, *alni* **var. n.** *humuli, albopilosus* Uz.(=*obsoletus* Pr. nec Uz.) **ab. n.** *obscuricornis, dilatus* **f. n.** *hemimacroptera* p. 59 Upper Austria, PRIESNER Jahresb. Oberöst. Musealver. **78** 1920.—*T. capito* see *Eocephalothrips.*

Trichothrips transvaalensis **sp. n.** Transvaal p. 300, HOOD Psyche **31.**—*T.* (*Dolerothrips*) *grisescens* p. 3, *maderi* p. 4, **spp. n.** Austria, PRIESNER Konowia **3.**—*T. lewisi* see *Malacothrips.*

Zygothrips (**subgen. n.** *Chonothrips*) *crassicornis* **sp. n.** W. Siberia p. 9, JOHN Ent. Mitt. **13.**

ANOPLURA.

Catalogue of Anoplura of Hungary, KOHAUT Fauna Regni Hung. Hemipt. (Aptera) 1918 p. 67.

Haemodipsus setoni **sp. n.** N. America p. 548, EWING Amer. J. Trop. Med. **4.**

Hoplopleura pacifica **sp. n.** Hawaii p. 9 figs., EWING Bern. P. Bish. Mus. Bull. **14.**

MALLOPHAGA.

On the taxonomy, biology and distribution of the biting lice of the family Gyropidae, EWING Proc. U. S. Nat. Mus. **63** art. 20 pp. 1–42.

Reorganisation of systematics of Menoponidae, FERRIS Parasitology **16** pp. 55–66.

Catalogue of Mallophaga of Hungary, KOHAUT Fauna Regni Hung. Hemipt. (Aptera) 1918 pp. 65–67.

Allogyropus **gen. n.** type *amplexans* Neum. p. 20, EWING Proc. U. S. Nat. Mus. **63** art. 20.

Esthiopterum nannopteri **sp. n.** p. 82, *potens* **var. n.** *minor* p. 84, Galapagos fig., EWING Zoologica **5.**

Eutrichophilus genettae **sp. n.** Spain p. 75 figs., FRESCA Bol. Soc. Esp. Hist. nat. **24.**

Gliricola key *distincta* **sp. n.** Colombia, p. 32 fig., EWING Proc. U. S. Nat. Mus. **63** art. 20.

Gliricolinae **subfam. n.** p. 29, EWING t.c.

Gyropinae **subfam. n.** p. 9, EWING t.c.

Gyropus key p. 13, *pollicaris* p. 16, *latipollicaris* p. 17, *gracilipes* p. 18, *wetmorei* p. 19, **spp. n.** Argentina figs., EWING t.c.

Heterogyropus **gen. n.** *heteronychus* **sp. n.** p. 27 Brazil fig., EWING t.c.

Macrogyropus **gen. n.** key p. 25, *dentatus* **sp. n.** Nicaragua p. 26, EWING t.c.

Monogyropus **gen. n.** key, *longus* Chile p. 10, *parvus* Argentina p. 11, **spp. n.** fig., EWING t.c.

Paragliricola **gen. n.** p. 29, *quadrisetosa* **sp. n.** fig. Peru p. 30, EWING t.c.

Protogyropinae **subfam. n.** p. 7, EWING t.c.

Protogyropus **gen. n.** p. 7, *normalis* **sp. n.** Argentina p. 8 fig., EWING t.c.

Ricinus uchidai **n. n.** for *intermedius* Uch. (nec Piaget) p. 274 fig., **subsp. n.** *major* p. 276, FRESCA Bol. R. Soc. Esp. Hist. nat. **24.**

Tetragyropus **gen. n.** key, type *lineatus* Neum. p. 21, *setifer* Ecuador p. 22, *aotophilus*, Bolivia p. 23, **spp. n.** fig., EWING Proc. U. S. Nat. Mus. art. 20.

PSOCOPTERA.

Gland hairs of larvae and nymphs of some Copeognatha, ENDERLEIN Tijd. Ent. **67** pp. 72–74.

Biology of Javanese Copeognatha, JACOBSON Tijd. Ent. **67** Suppl. pp. 65–71.

Atropos pulsatoria biology pp. 46–48, SOLOWIOW Zs. wiss. Insektenbiol. **19**; biological notes p. 238, SOLOWIOW Zool. Anz. **59.**

Caecilius corticis **sp. n.** figs. England p. 58, PEARMAN Ent. Mo. Mag. **60.**

Clematostigma tunesicum **sp. n.** Tunis p. 33, ENDERLEIN Konowia **2** 1923.

Clistopsocus **gen. n.** p. 65, *dilatus* **sp. n.** Costa Rica p. 66 fig., NAVÁS Broteria **21.**

Epipsocus antillanus **sp. n.** Jamaica p. 422 fig., BANKS Bull. Mus. Comp. Zoöl. **65.**

Lachesilla limbata **sp. n.** Esthonia p. 36, ENDERLEIN in DAMPF Sitzungsber. naturf. Ges. Univ. Dorpat **31.**

Loensia **gen. n.** for *Psocus fasciata* F. p. 35, ENDERLEIN t.c.

Neopsocus tostus **sp. n.** Costa Rica p. 64, NAVÁS Broteria **21.**

Peripsocus minutus **sp. n.** Porto Rico p. 423, BANKS Bull. Mus. Comp. Zoöl. **65.**

Pseudocaecilius wolcotti **sp. n.** Porto Rico p. 423, BANKS t.c.

Pseudopsocus rostocki notes p. 122 fig., PEARMAN Ent. Mo. Mag. **60.**

Psocus cuencanus **sp. n.** Ecuador p. 32, ENDERLEIN Konowia **2** 1923.—*P.* ? *serrei* **sp. n.** Costa Rica p. 65 fig., NAVÁS Broteria **21.**—*P. saghaliensis* **sp. n.** Saghalien p. 488 figs., OKAMOTO & KUWAYAMA Ann. Mag. N. H. (9) **14.**—*P. pedicularius* see *Psyllipsocus ramburii.*—*P. fasciata* see *Loensia.*

Psyllipsocus ramburii Selys (=*Psocus pedicularius* Villers) notes p. 121 figs., PEARMAN Ent. Mo. Mag. **60.**

Psylloneura ugandana **sp. n.** Uganda p. 245 figs., KARNY Ann. Mag. N. H. (9) **14.**

Thrysopsocus stigmaticus **sp. n.** Peru p. 422 fig., BANKS Bull. Mus. Comp. Zoöl. **65.**

ISOPTERA.

Nests of termites, ANNANDALE J. Bombay N. H. Soc. **30** p. 25 figs.

Parasitic protozoa from the intestines of Termites, DOGIEL in DOGIEL & SOKOLOW Sci. Results Zool. Exped. B. E. Afr. & Uganda in 1914 **1** 1916 no. 2 67 pp. figs. (also in Russian).

Termite nomenclature, FULLER S. Afr. J. N. H. **4** pp. 356–364.

Differentiation of castes in Termites, JUCCI Mem. Ac. Naz. Lincei (5) **14** p. 269 figs.

A strange termite nest, STUMPER La Nature, **1924** pp. 351–352 fig.

Amphidotermes **gen. n.** [nom. nud.] for *Termes basidens* Sjöst. p. 256, SJÖSTEDT Rev. zool. afr. **12.**

Ancistrotermes sudanensis p. 255, *periphrasis* p. 496, **spp. n.** Sudan, SJÖSTEDT t.c.

Angulitermes **gen. n.** [nom. nud.] for *Mirotermes frontalis* Silv. p. 257, SJÖSTEDT t.c.

Anoplotermes key p. 36, *hondurensis* **sp. n.** Honduras p. 37 fig., SNYDER Proc. U. S. Nat. Mus. **64** art. 6.

Apicotermes angustatus p. 254, *kisantuensis* p. 496, **spp. n.** Belgian Congo, SJÖSTEDT Rev. zool. afr. **12.**

Armitermes (*A.*) *chagresi* p. 187, (*Rhynchotermes*) *perarmatus* p. 188, **spp. n.** Panama Canal Zone, SNYDER J. Agric. Res. **29.**

Capritermes sowerbyi **sp. n.** China p. 354, LIGHT China J. Sci. & Arts **2.**

Cryptotermes campbelli **sp. n.** China p. 57, LIGHT t.c.

Cubitermes heghi, gibbifrons, planifrons p. 255, *bulbifrons* Belgian Congo, *zulucola* Zululand **spp. n.**, *fungifaber* **var. n.** *elongata, speciosus*, p. 256, *loubetsiensis, antennalis*, **spp. n.** p. 493 Congo, SJÖSTEDT Rev. zool. afr. **12.**—*C. pretoriensis* see *Lepidotermes.*

Eutermes validity p. 277, FULLER S. African J. N. H. **4.**—*E. matangensis* development pp. 483 & 609, BATHELLIER C.R. Acad. Sci. Paris **179.**—*E. processionarius* **sp. n.** Western Ghats p. 302 figs., SCHMITZ Zool. Anz. **59.**—*E. schoutedeni, minusculus, konduensis, putidus* p. 40, *aethiops, incurvus, nanus*, (*Trinervitermes*) *diplacodes* p. 41, *muneris*, (*T.*) *gratiosus*, (*T.*) *carbo* p. 42, **spp. n.** Belgian Congo, (*T.*) *messor* **n. n.** (♀ *Eutermes trinervus* Hav. nec Ramb.) p. 257, (*T.*) *grossus*, (*E.*) *impetus* p. 493, (*E.*) *insularis*, (*E.*) *ueleensis*, (*E.*) *dulcis*, (*E.*) *torquatus* p. 494 Africa, (*T.*) *loubetsiensis* French Congo p. 496 **spp. n.**, SJÖSTEDT Rev. zool. afr. **12.**—*E. villifrons* see *Trichotermes, lamanianus* see *Noditermes, mandibularis* see *Ophiotermes, jucundus* see *Fastigitermes, tubuliferus* see *Proboscitermes.*

Fastigitermes **gen. n.** [nom. nud.] for *Eutermes jucundus* Sjöst. p. 257, SJÖSTEDT Rev. zool. afr. **12.**

Glyptotermes pubescens **sp. n.** Porto Rico p. 10 fig., SNYDER Proc. U. S. Nat. Mus. **64** art. 6.

Hoplognathotermes furcatidens **sp. n.** French Congo p. 496, SJÖSTEDT Rev. zool. afr. **12.**

Kalotermes sinensis **sp. n.** China p. 54, LIGHT China J. Sci. and Arts **2.**—*K. panamae* p. 182, (*Glyptotermes*) *angustus* p. 184, (*G.*) *barbouri* p. 185, (*G.*) *emarginicollis* p. 186, **spp. n.** Panama Canal Zone figs., SNYDER J. Agric. Res. **29.**—*K. approximatus* further description p. 208, SNYDER Proc Ent. Soc. Wash. **26.**—*K. marjoriae* Hawaii p. 3, *tabogae* Panama p. 4, **spp. n.**, SNYDER Proc. U. S. Nat. Mus. **64** art. 6.

Lepidotermes **gen. n.** for *Cubitermes pretoriensis* Sjöst. p. 497, SJÖSTEDT Rev. zool. afr. **12.**

Leucotermes key to American spp. p. 15, *convexinotatus* Panama, p. 15, *cardini* Bahamas p. 17, *longiceps* Brazil p. 20, **spp. n.** figs., SNYDER Proc. U. S. Nat. Mus. **64** art. 6.

Macrotermes gilvus development p. 609, BATHELLIER C.R. Acad. Sci. Paris **179.**—*M. barneyi* **sp. n.** China p. 242, LIGHT China J. Sci. & Arts **2.**—*M. schoutedeni* p. 39, *ituriensis* p. 253, **spp. n.** Belgian Congo, SJÖSTEDT Rev. zool. afr. **12.**—*M. schoutedeni* see *Tumilitermes.*

Microcerotermes validity p. 277, FULLER S. African J. N. H. **4.**

Microtermes lepidus **sp. n.** Senegal p. 496, SJÖSTEDT Rev. zool. afr. **12.**

Mirotermes panamaensis dealated adult ♂ described p. 192 fig., SNYDER J. Agric. Res. **29.**—*M. frontalis* see *Angulitermes.*

Nasutitermes (*Obtusitermes* **subgen. n.**) *biformis* **sp. n.** Panama pp. 20, 196, *aequalis* Cuba p. 22, (*Tenuirostritermes*) *wolcotti* Porto Rico p. 131, **spp. n.** figs., SNYDER Proc. Ent. Soc. Wash. **26.**—*N.* (*Uniformitermes* **subgen. n.**) *barrocoloradensis* **sp. n.** Panama Canal Zone p. 191 fig., SNYDER J. Agric. Res. **29.**—*N.* (*Subulitermes*) *zeteki* **sp. n.** Panama p. 32, SNYDER Proc. U. S. Nat. Mus. **64** art. 6.

Neotermes major soldier described p. 383, SNYDER Proc. Hawaiian Ent. Soc. **5.**—*N. angustoculus* **sp. n.** Florida p. 8, SNYDER Proc. U. S. Nat. Mus. **64** art. 6.

Noditermes **gen. n.** [nom. nud.] for *Eutermes lamanianus* Sjöst. p. 257, SJÖSTEDT Rev. zool. afr. **12.**

Obtusitermes **subgen. n.** see *Nasutitermes.*

Odontotermes planiceps, congoënsis, sudanensis p. 254, *robustus, rectanguloides, amaniensis* p. 490, *fallax, mukimbunginis, interveniens, zulunatalensis, ugandanicus* p. 491, *culturarum, pretoriensis, bomaënsis, tanganicus, nolaënsis* p. 492, **spp. n.** Africa, SJÖSTEDT Rev. zool. afr. **12.**

Ophiotermes **gen. n.** [nom. nud.] for *Eutermes mandibularis* Sjöst. p. 257, SJÖSTEDT t.c.

Pericapritermes cordatus **sp. n.** Congo p. 496, SJÖSTEDT t.c.

Proboscitermes **gen. n.** [nom. nud.] for *Eutermes tubuliferus* Sjöst. p. 257, SJÖSTEDT t.c.

Procubitermes ueleensis **sp. n.** Belgian Congo p. 493, SJÖSTEDT Rev. zool. afr. **12.**—*P. bidentatus* see *Unguitermes.*

Prorhinotermes molinoi **sp. n.** Panama p. 43 figs., SNYDER J. Wash. Acad. Sci. **14.**

Protermes hirticeps **sp. n.** Belgian Congo p. 495, SJÖSTEDT Rev. zool. afr. **12.**

Psammotermes senegalensis **sp. n.** Senegal p. 495, SJÖSTEDT t.c.

Pseudacanthotermes **gen. n.** [nom. nud.] for *Termes militaris* Hag. p. 256, *curticeps* **sp. n.** Belgian Congo p. 497 SJÖSTEDT t.c.

Reticulitermes fukienensis **sp. n.** China p. 142, LIGHT China J. Sci. & Arts **2.**

Rhinotermes longidens **sp. n.** Panama p. 83 figs., SNYDER Proc. Biol. Soc. Wash. **37.**

Syntermes key p. 21, *magnoculus* p. 23, *emersoni* p. 26 Brazil, *colombianus* Colombia p. 29, **spp. n.** fig., SNYDER Proc. U. S. Nat. Mus. **64** art. 6.

Termes hainanensis **sp. n.** China p. 251, LIGHT China J. Sci. & Arts **2.**—*T. carboniceps* Belgian Congo p. 39, *lautus* p. 254, (*Protermes*) *esuriens* p. 255 Transvaal, **spp. n.**, SJÖSTEDT Rev. zool. afr. **12.**—*T. lamani* **sp. n.**, Congo p. 1 fig., SJÖSTEDT Ark. Zool. **15** no. 20.—*T. militaris* see *Pseudacanthotermes, basidens* see *Amphidotermes.*

Trichotermes **gen. n.** [nom. nud.] for *Eutermes villifrons* Sjöst. p. 257, SJÖSTEDT Rev. zool. afr. **12.**

Tumilitermes **gen. n.** [nom. nud.] for *Macrotermes schoutedeni* Sjöst. p. 256, *kibonotensis* **sp. n.** Tanganyika p. 253, SJÖSTEDT t.c.

Unguitermes **gen. n.** [nom. nud.] for *Procubitermes bidentatus* Silv. p. 257 SJÖSTEDT t.c.

Uniformitermes **subgen. n.** see *Nasutitermes.*

EMBIOPTERA.

Embia dissimilis **sp. n.** Kamerun p. 5 fig., RIMSKY-KORSAKOV Ent. Mitt. **13.**—*E. californica* see *Oligotoma.*

Oligotoma inaequalis St. Croix, *venosa* Cuba **spp. n.** figs., *Embia californica* transferred to, p. 421, BANKS Bull. Mus. Comp. Zoöl. **65.**—*O. ruficollis* redescribed p. 62 fig., NAVÁS Broteria **21.**

PLECOPTERA.

Head and mouth-parts of Plecoptera figs., HOKE J. Morph. **38** p. 347.

Biology of German Plecoptera, SCHOENEMUND Biol. Tiere Deutschlands Teil **32** pp. 1–34.

Capnella **gen. n.** p. 43, *granulata, recta* p. 44, *incisura* p. 45, *vivipara, nana* p. 46, *columbiana, excavata, tumida* p. 47, *teresa, manitoba* p. 54, *glabra, barberi, brevicauda* p. 55, *fibula, elongata* p. 56, *californica, gracilaria* p. 57, **spp. n.** N. America, CLAASSEN Can. Ent. **56.**

Capnia oklandi **sp. n.** Novaya Zemlya p. 5 figs., MORTON Rept. Norw. Exp. Nov. Zeml. no. 16 1923.

Forquilla **gen. n.** (near *Neoperla*) *divisa* **sp. n.** Costa Rica p. 74 fig., NAVÁS Broteria **21.**

Neoperla bakeri p. 426, *consimilis*, *hermosa* p. 427, *oculata*, *atropennis* p. 428, **spp. n.** Philippines figs., BANKS Bull. Mus. Comp. Zoöl. **65.**—*N. antica* p. 71, *costana* p. 72, *lineata* p. 73, **spp. n.** Costa Rica, NAVÁS Broteria **21.**— *N. appollinaris* **sp. n.** Colombia p. 250, NAVÁS Ann. Soc. sci. Bruxelles C.R. **43.**

Peltoperla mindanensis **sp. n.** Philippines p. 426 fig., BANKS Bull. Mus. Comp. Zoöl. **65.**

Raphidia crotchi **sp. n.** Calif. p. 429 fig., BANKS t.c.

EPHEMEROPTERA.

Notes on structure of the eye in relation to behaviour of Ephemerids, ALVERDES Naturwissenschaften **12** p. 575.

Finnish Ephemeroptera, LESTAGE Bull. Soc. ent. Belg. **6** pp. 33–36.

Notes on Eaton's Monograph of Ephemeridae, LESTAGE Ann. Soc. ent. Belg. **64** pp. 33–60.

Ephemerids of S. Africa with keys, LESTAGE Rev. zool. afr. **12** pp. 316–352.

Biology of German Ephemeridae, ULMER Biol. Tiere Deutschlands Teil **34** 40 pp. figs.

Descriptive list of species of Ephemeroptera' from Sunda Islands and Philippines, ULMER Treubia **6** pp. 28–91 figs.

Adenophlebia key to S. African p. 335, *peringueyella* **sp. n.** S. Africa p. 333, LESTAGE Rev. zool. afr. **12.**—*A. westermanni* see *Esbenophlebia.*—*Adenophlebia* Ulmer see *Adenophlebiodes.*

Adenophlebiodes **gen. n.** for *Adenophlebia* Ulmer type *ornata* Ulm. p. 33, ULMER Konowia **3.**

Afronurus **gen. n.** for *Ecdyonurus peringueyi* Esb. Pet. p. 349, LESTAGE Rev. zool. afr. **12.**

Ameletus ludens male pp. 308–310, NEEDHAM Psyche **31.**

Asthenopodes **gen. n.** for *Asthenopus* Ulmer type *albicans* Pict., ULMER Konowia **3.**

Asthenopus Ulmer see *Asthenopodes.*

Atalophlebia key to S. African p. 330, *phoeocera*, *natalica* p. 325, *peterseni* p. 328, **spp. n.** S. Africa, LESTAGE Rev. zool. afr. **12.**—*A. brieni* **sp. n.** Brazil p. 21, LESTAGE Ann. Soc. ent. Belg. **64.**

Baetis lasallei Wisconsin, *parallela* Nevada, **spp. n.** p. 425 figs., BANKS Bull. Mus. Comp. Zool. **65.**—*B. sinuosus* **sp. n.** Costa Rica p. 68 fig., NAVÁS Broteria **21.**—*B. harti* p. 7, *pallidula* p. 8, **spp. n.** Illinois, MCDUNNOUGH Can. Ent. **56.**

Brachycercidae **n. n.** for Coenidae p. 62, LESTAGE Ann. Soc. ent. Belg. **64.**

Brachycercus Curt. (=*Coenis* Steph.=*Eurycoenis* Bgtn.) p. 62, LESTAGE Ann. Soc. ent. Belg. **64.**

Caenodes philippinensis **sp. n.** Philippines p. 48 fig., ULMER Treubia **6.**

Campsurus primus **sp. n.** Illinois p. 7 fig., MCDUNNOUGH Can. Ent. **56.**

Centroptiloides key p. 343, *marginata* **sp. n.** S. Africa p. 341, LESTAGE Rev. zool. afr. **12.**

Centroptilum sudafricanum **sp. n.** S. Africa p. 344, LESTAGE Rev. zool. afr. **12.**—*C. rufostrigatum* p. 95, *bifurcatum*, *bellum* p. 96, *ozburni*, *simile* p. 97, *infrequens* p. 98, **spp. n.** Canada fig., MCDUNNOUGH Can. Ent. **56.**

Choroterpes albiannulata **sp. n.** Canada p. 221, MCDUNNOUGH Can. Ent. **56.**

Cinygma atlantica, *confusa*, p. 131, *hyalina*, *deceptiva* p. 132, **spp. n.** Canada fig., MCDUNNOUGH Can. Ent. **56.**—*C. bipunctata* **sp. n.** New England p. 76 fig., MCDUNNOUGH Occ. Paprs. Soc. Nat. Hist. Boston **5.**—*C. mirabile* **sp. n.** Finland p. 34, ARO (1910) in LESTAGE Bull. Soc. ent. Belg. **6.**—*C. asiaticum* **sp. n.** Turkestan p. 35 fig., ULMER Konowia **3.**

Cloeon carolina **sp. n.** U.S.A. p. 426, BANKS Bull. Mus. Comp. Zoöl. **65.**—*C.*, key to African males p. 428, *smaeleni* **sp. n.** Belgian Congo p. 426 fig., LESTAGE Rev. zool. afr. **12.**

Coenis see *Brachycercus* and *Ordella.*

Ecdyonurus convergens **sp. n.** Finland p. 36, ARO (1910) in LESTAGE Bull. Soc. ent. Belg. **6.**—*E. lyriformis* **sp. n.** Canada p. 226 fig., MCDUNNOUGH Can. Ent. **56.**—*E. lobatus* **sp. n.** Philippines p. 83 fig., ULMER Treubia **6.**—*E. peringueyi* see *Afronurus.*

Epeorus assimilis wing morphology pp. 1–74 figs., ADOLPH Nova Acta Leop. **106** 1920.—*E. morrisoni* Nevada p. 424, *undulatus* p. 425 New Mexico **spp. n.** figs., BANKS Bull. Mus. Comp. Zool. **65.**

Ephemera pictipennis **sp. n.** China p. 28 fig., ULMER Konowia **3.**

Ephemerella infrequens, norda p. 223, *tibialis* p. 224, **spp. n.** N. America fig., MCDUNNOUGH Can. Ent. **56.**—*E. temporalis* **sp. n.** Ontario p. 73 fig., MCDUNNOUGH Occ. Paprs. Soc. N. H. Boston **5.**

Ephemerellina **gen. n.** p. 346, *barnardi* **sp. n.** S. Africa p. 348, LESTAGE Rev. zool. afr. **12.**

Esbenophlebia **gen. n.** for *Adenophlebia westermanni* Esben-Petersen S. Africa p. 336 fig., LESTAGE Rev. zool. afr. **12.**

Eurycoenis see *Brachycercus.*

Hagenulus eatoni **sp. n.** Haiti p. 423 fig., BANKS Bull. Mus. Comp. Zoöl. **65.**

Heptagenia ithaca **sp. n.** New York, *interpunctata* Say notes p. 17, CLEMENS & LEONARD Can. Ent. **56.**—*H.* (*Ecdyonurus* ?) *integer* Illinois p. 9, *kennedyi* California, *flavianula* Colorado p. 225, **spp. n.** fig., MCDUNNOUGH Can. Ent. **56.**

Hexagenia rigida p. 90, *atrocaudata* p. 92, **spp. n.** Ontario fig., MCDUNNOUGH Can. Ent. **56.**—*H. bilineata* mating flight p. 24, SNYDER Proc. Ent. Soc. Wash. **26.**

Iron albertae p. 129, *grandis* p. 130 **spp. n.** Canada, MCDUNNOUGH Can. Ent. **56.**

Leptophlebia heteronea p. 93, *moerens* p. 94, *guttata, volitans* p. 95, Canada, *associata* California, *brunneipennis* Washington p. 221, **spp. n.** fig., MCDUNNOUGH Can. Ent. **56.**—*L. johnsoni* **sp. n.** New Hampshire p. 73 fig., MCDUNNOUGH Occ. Paprs. Soc. N. H. Boston **5.**

Neobaetis **gen. n.** (near *Baetis*) *paulinus* **sp. n.** fig., Costa Rica p. 69, NAVÁS Broteria **21.**

Noyopsis **gen. n.** (near *Noya*) *fusca* **sp. n.** Costa Rica p. 70 fig., NAVÁS Broteria **21.**

Oligoneuria Pict. (nec Etn.) notes and key p. 32, ULMER Konowia **3.**

Oligoneuriella **gen. n.** for *Oligoneuria* auct. (part) type *rhenana* Imh. p. 31 ULMER Konowia **3.**

Ordella Camp. (= *Coenis* Steph. et auct.) p. 62, LESTAGE Ann. Soc. ent. Belg. **64.**

Palmenia **gen. n.** *fennica* **sp. n.** Finland, p. 35 ARO (1910) in LESTAGE Bull. Soc. ent. Belg. **6.**

†*Phthartus africanus* **sp. n.** Africa p. 331, HAUGHTON Ann. S. Afr. Mus. **12.**

Pseudocloeon veteris **sp. n.** Illinois p. 8, MCDUNNOUGH Can. Ent. **56.**—*P. boettgeri* **sp. n.** Philippines Sumatra p. 70 fig., ULMER Treubia **6.**

Rhithogena hespera **sp. n.** Pacoima p. 424, BANKS Bull. Mus. Comp. Zoöl. **65.**

Siphlonurus (or *Siphlurella*) *linnaeanus* pp. 47–53 Belgium, LESTAGE Bull. Soc. ent. Belg. **6.**—*S. novangliae, rapidus* **spp. n.** New England p. 75 fig., MCDUNNOUGH Occ. Paprs. Soc. N. H. Boston **5.**—*S. berenice* McD. (=*novangliae* McD.) p. 224, *barbarus* **sp. n.** New York p. 225 fig., MCDUNNOUGH Can. Ent. **56.**

Thraulodes irretitus **sp. n.** Costa Rica p. 66 fig., NAVÁS Broteria **21.**

Torleya belgica distribution in Germany p. 331 figs., RUMPHORST Zool. Anz. **59.**

†PALAEODICTYOPTERA.

†*Dunbaria* **gen. n.** p. 203, *fasciipennis* **sp. n.** p. 205 Lower Permian Kansas figs. TILLYARD Amer. J. Sci. **7.**

ODONATA
(PARANEUROPTERA).

Notes on structure of eye in relation to behaviour of Libellulids, ALVERDES Naturwissenschaften **12** 1924 p. 575.

The brain of Libellulidae, BALDUS Zs. wiss. Zool. **121** p. 557.

Monograph of Russian Libellulidae with keys, BARTENEV Faune Russ. Pseudoneuropt. **1** 1919 pp. 353–576.

List of Odonata of Yunnan, FRASER J. Asiat. Soc. Beng. **19** 1923 p. 447 figs.

Odonata of the valley of Dunajec (Carpathians), FUDAKOWSKI Polsk. Pismo ent. **3** pp. 75–80.

Intelligence and sense organs in Odonata, HEWER Ann. Rep. Proc. Bristol Nat. Soc. (4) **6** p. 38.

Notes on Odonata in the Paris Museum, LACROIX Bull. Mus. Hist. nat. Paris **1924** p. 215.

Catalogue of Odonata of Ceylon, LAIDLAW Spol. Zeyl. **12** pp. 335–374 15 figs.

Note on a swarm of Libellulidae in France, LAMARQUE Proc.-verb. Soc. linn. Bordeaux **75** p.194.

Catalogue of Pseudo-Neuroptera of Hungary, MOCSÁRY Fauna Regni Hung. Pseudo-Neuroptera **1918** pp. 23–32.

Notes on Odonata of Palestine and adjacent regions, MORTON Trans. Ent. Soc. **1924** pp. 25–44.

Emergence of nymph in Odonata, MULLER Zs. Morph. Oekol. Tiere **3** p. 188.

Iberian Paraneuroptera (Odonata), keys and lists, NAVÁS Mem. Soc. ent. España no. **1** 66 pp. 5 figs.

Revision of Odonata of Fiji, TILLYARD Trans. Ent. Soc. **1923** p. 305 figs.

The Odonata of the Thunder Bay District, Ontario, WALKER Can. Ent. **56** pp. 170–176, 182–189.

Acanthallagma **gen. n.** p. 1, *strohmi* **p. 9,** *caeruleum* p. 13, *luteum* p. 16, **spp. n.** Brazil figs., WILLIAMSON & WILLIAMSON Occas. Pprs. Mus. Zool. Univ. Mich. **154.**

Aciagrion, phylogenetic notes, key, 16 figs. 9 pp., LAIDLAW Proc. U. S. Nat. Mus. **66** art. 10.

Agriocnemis flavilabris **n. n.** for *forcipata* Sjöst. (nec le Roi) p. 18, CAMPION Entomologist **57.**—*A. vitiensis* **sp. n.** Fiji p. 337 fig., TILLYARD Trans. Ent. Soc. **1923.**

Agrion puella **subsp. n.** *syriaca* Palestine p. 32 figs., MORTON Trans. Ent. Soc. **1924.**

Anotogaster gigantica **sp. n.** India p. 48, FRASER J. Bombay N. H. Soc. **30.**—*A. annandalei* p. 451, *gregoryi* p. 453, **spp. n.** Yunnan figs., FRASER J. Asiat. Soc. Beng. **19.**

Austrolestes vitiensis **sp. n.** Fiji p. 309 fig., TILLYARD Trans. Ent. Soc. **1923.**

Brachydiplax yunnanensis **sp. n.** Yunnan p. 450, FRASER J. Asiat. Soc. Beng. **19.**

Caconeura o'doneli **sp. n.** India p. 51, FRASER J. Bombay N. H. Soc. **30.**

Calopteryx oberthuri see *Matrona.*

Coeliccia poungyi **sp. n.** India p. 52, FRASER J. Bombay N. H. Soc. **30.**

Coenagrion violacea **sp. n.** India p. 84, FRASER Mem. Dept. Agric. India **8.**—*C. dorothea* **sp. n.** Yunnan p. 462 figs., FRASER J. Asiat. Soc. Beng. **19.**

Coryphagrion **gen. n.** p. 217, *grandis* **sp. n.** p. 218 E. Africa fig., MORTON Entomologist **57.**

Enallagma dubium **sp. n.** Georgia p. 321 figs., ROOT Ent. News **35.**—*E. boreale* (= *calverti*) p. 173, WALKER Can. Ent. **56.**

Gomphus flavipes biology pp. 269–280, POPOVA Arb. Biol. Wolga-Sta. **6** 1923.

Gynacantha apicalis **sp. n.** India p. 83, FRASER Mem. Dept. Agric. India **8.**

Hagenius nigricolor **sp. n.** Shan States p. 76 fig., FRASER t.c.

Helocordulia notes p. 1, *selysii* naiad described p. 3 figs., KENNEDY Proc. U. S. Nat. Mus. **64** art. 12.

Hydrobasileus croceus larva described p. 71 fig., FRASER Mem. Dept. Agric. India **8.**

Indolestes veronica **sp. n.** India p. 85 FRASER Mem. Dept. Agric. India **8.**—*I. coerulea* **sp. n.** Yunnan p. 460 figs., FRASER J. Asiat. Soc. Beng. **19.**

Ischnura elegans notes on variation and teneral colour phases p. 273, **var. n.** *infuscans-obsoleta* p. 278, KILLINGTON Entomologist **57.**

Lamellogomphus **gen. n.** type *Onychogomphus biforceps* Selys p. 983, *inglisi* p. 984, *drummondi* p. 985, *malabarensis* p. 990 **spp. n.** India figs., FRASER J. Bombay N. H. Soc. **29.**—*L. cacharicus* **sp. n.** India p. 81, FRASER Mem. Dept. Agric. India **8.**

Lestes nigriceps **sp. n.** Pusa p. 85, FRASER t.c.

Macromia cupricincta **sp. n.** Burma p. 74, FRASER t.c.

Matrona oberthuri MacLach. from *Calopteryx* p. 457 figs., FRASER J. Asiat. Soc. Beng. **19.**

Megalogomphus hannyngtoni exuviae p. 79 fig., FRASER Mem. Dept. Agric. India **8.**

Mesogomphus lindgreni p. 995, *risi* p. 996 **spp. n.** India figs., FRASER J. Bombay N. H. Soc. **29.**—*M. genei* synonymy p. 35, MORTON Trans. Ent. Soc. **1924.**

Micromerus greeni **sp. n.** Ceylon p. 352 fig., LAIDLAW Spol. Zeyl. **12.**

Mnais gregoryi p. 457, *maclachlani* p. 458, **spp. n.** Yunnan fig., FRASER J. Asiat. Soc. Beng. **19.**

Nesobasis key p. 315, *corniculata* p. 319, *simmondsi* p. 320, *comosa* p. 321, *angulicollis* p. 322, *subhumeralis* p. 325, *selysi* p. 327, *campioni* p. 329, *aurantiaca* p. 330, *brachycerca* p. 332, *heteroneura* p. 333, **spp. n.** Fiji figs., TILLYARD Trans. Ent. Soc. **1923.**

Onychogomphus striatus, duaricus p. 1001, *dingavani* p. 1005, **spp. n.** India figs., FRASER J. Bombay N. H. Soc. **29.**—*O. walli, diminutivus* **spp. n.** India p. 109 figs., FRASER op. cit. **30.**—*O. biforceps* see *Lamellogomphus.*

Ophiogomphus howei **sp. n.** Massachusetts p. 344 fig., BROMLEY Ent. News **35.**—*O. howei* ♂ p. 345 fig., CALVERT Ent. News **35.**

Orogomphus preciosus **sp. n.** Sikkim p. 75, FRASER Mem. Dept. Agric. India **8.**

Pantala flavescens comparison of earlier instars pp. 289–311 fig., LAMB Trans. Amer. Ent. Soc. **50.**

Perilestes, key p. 8, *guianensis* Fr. Guiana p. 12, *remotus* Canal Zone, Colombia p. 14, *magdalenae* Colombia p. 17, *kahli* Brazil, Bolivia p. 24, *solutus* Brazil p. 30, *minor* Brazil p. 34 **spp. n.**, *fragilis* Hagen redescribed p. 27, WILLIAMSON & WILLIAMSON Univ. Mich. Mus. Zool. Misc. Pubns. no. **14.**

Philogenia, generic characters pp. 3–11, key p. 15, *polyxena* Venezuela p. 27, *elisabeta* Peru p. 29, *cristalina* Colombia p. 35, *augusti* Panama p. 42, *expansa* p. 50, *lankesteri* p. 51 Costa Rica **spp. n.**, *berenice* redescribed p. 33 figs., CALVERT Trans. Amer. Ent. Soc. **50.**

Pseudagrion pacificum **sp. n.** Fiji p. 311 figs., TILLYARD Trans. Ent. Soc. **1923.**

Pseudophoea ornata **sp. n.** Hainan p. 174, *compar* MacL. a form of *formosa* Hagen p. 175, CAMPION Ann. Mag. N. H. (9) **13.**

Sympetrum striolatum **subsp. n.** *imitoides* China and Vladivostok p. 369, *sanguineum* **var. n.** *obsoletum* Russia and Turkestan p. 444, BARTENEV Faune Russ. Pseudoneuropt. **1** 1919.—*S. haematoneura* **sp. n.** Kashmir p. 70, FRASER Mem. Dept. Agric. India **8.**

Teinobasis wallacei New Guinea p. 613, *aluensis* Solomon Is. p. 614, **spp. n.** figs., CAMPION Ann. Mag. N. H. (9) **14.**

Tetrathemis aurea **sp. n.** Lower Burma p. 69 fig., FRASER Mem. Dept. Agric. India **8.**

ORTHOPTERA.

List of Orthoptera of Hertfordshire, BARRETT Trans. Herts. N. H. Soc. **17** 1923 p. 331.

Notes on the Orthoptera of the Eastern United States, BLATCHLEY J. N. Y. Ent. Soc. **32** pp. 127–132.

Additions and corrections to the list of British Columbia Orthoptera, BUCKELL Proc. Br. Columbia Ent. Soc. **21** pp. 7–12.

The Orthoptera of Palestine, BUXTON & UVAROV Bull. Soc. R. ent. Egypte **1923** 1924 pp. 167–214 5 figs.

Le double stigmate de quelques Orthoptères, CARPENTIER Bull. Soc. ent. Belg. **6** pp. 123–155.

Orthoptera and Dermaptera collected in Barbados and Antigua in 1918, CAUDELL Univ. Iowa Studies N. H. **10** no. 1 1922 pp. 19–44 2 figs.

Synonymic and other notes on Orthoptera of Br. E. Africa, CHOPARD Voy. Babault Afr. or. angl. **1921** pp. 1–61 figs.

Orthoptera and Dermaptera of France with many keys, etc., CHOPARD Faune de France **3** 1922 212 pp. figs.

Abdominal segments of Orthoptera [cont'd.], CHOPARD Insecta **11–12** pp. 113–350 7 pls. 14 figs.

Moravian Orthoptera, GINTER Casopis **21** pp. 7–11.

Notes on Orthoptera and Dermaptera of Ecuador, HEBARD Proc. Acad. Nat. Sci. Philad. **76** p. 109.

Dermaptères et Orthoptères de France et de la Faune européenne—I, HOULBERT Paris Doin 1924 382 pp. 9 pls. 87 figs.

Malayan Orthoptera, KARNY Treubia **5** pp. 1–234 fig.

Notes on some Rumanian Orthoptera, MERTENS Intern. ent. Zs. **17** pp. 190–193.

Catalogue of Hungarian Orthoptera, PUNGUR Fauna Regni Hung. Orthoptera 1918 pp. 1–16.

Orthopterous fauna of Baden, STROHM Mitt. bad. ent. Ver. **1** pp. 51–64 87–103.

New and interesting Egyptian Orthoptera, UVAROV Min. Agr. Egypt Bull. **41** 41 pp. 3 pls.

FORFICULIDAE.

Habits of earwigs, FULTON Ann. Ent. Soc. Amer. **17** pp. 357–367 fig.

Anechura quelparta **sp. n.** Quelpart I. p. 53, OKAMOTO Bull. Agric. Expt. Sta. Govt. Gen. Chosen **1**.

Apachyus queenslandicus p. 5, *athertonensis* p. 6, **spp. n.** Queensland, MJÖBERG Ark. Zool. **16** no. 21.

Chaetospania pygmaea **sp. n.** Queensland p. 8, MJÖBERG t.c.

Diplatys flavobrunnea **sp. n.** Barkuda I. p. 167 fig., CHOPARD Rec. Ind. Mus. **26**.

Euborellia tatei **sp. n.** Ecuador p. 114 figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76**.

Forcipula borellii **sp. n.** Assam p. 90 figs., CHOPARD Rec. Ind. Mus. **26**.

Strongylopsalis tarsata **sp. n.** Ecuador p. 115 figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76**.

GRYLLOBLATTIDAE.

Galloisia **gen. n.** p. 53, *nipponensis* **sp. n.** Japan p. 54 fig., CAUDELL & KING Proc. Ent. Soc. Wash. **26**.—See *Galloisiana*.

Galloisiana **n. n.** for *Galloisia* p. 92, CAUDELL Proc. Ent. Soc. Wash. **26**.

Grylloblatta barberi **sp. n.** Calif. p. 369, CAUDELL J. Wash. Acad. Sci. **14**.

BLATTIDAE.

Bionomics of Blattidae, TAKAHASHI Dobuts. Z. **36** pp. 215–230.

Notes on Blattidae of the Mascarene Is., BOLIVAR Ann. Mag. N. H. (9) **13** pp. 314–356 figs.

Key to genera of Phyllodromiinae of Seychelles and adjacent islands, BOLIVAR Ann. Mag. N. H. (9) **13** p. 320.

Malayan and East Indian Blattidae, with various keys, CAUDELL Phil. J. Sci. **24** pp. 641–666 1 pl.

Some tropical Blattidae, KARNY Treubia **5** pp. 3–19.

Dorsal glands of Blattidae, KONČEK Zs. wiss. Zool. **122** p. 310 fig.

Anaplecta falcifer **sp. n.** Ecuador p. 119 figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Blatta benardi **sp. n.** B. E. Afr. p. 10 figs., CHOPARD Voy. Babault Afr. or. angl. **1921.**—*B. orientalis* biology pp. 57–59, RAU Trans. Acad. Sci. St. Louis **25.**

Blattella similis p. 325, *lineaticollis* p. 327, **spp. n.** Seychelles, BOLIVAR Ann. Mag. N. H. (9) **13.**

Cardacopsis **gen. n.** (near *Cardax*) p. 12, *shelfordi* **sp. n.** Java p. 18 fig., KARNY Treubia **5.**

Ceratinoptera dispar **sp. n.** Barkuda I. p. 171 fig., CHOPARD Rec. Ind. Mus. **26.**

Delosia **gen. n.** *ornata* **sp. n.** Amirantes p. 338 figs., BOLIVAR Ann. Mag. N. H. (9) **13.**

Distichopis **gen. n.** p. 345, *stylopyga* **sp. n.** Seychelles p. 346 figs., BOLIVAR t.c.

†*Drybrookia* **gen. n.** *cubitalis* **sp. n.** coal measures England p. 20 fig., BOLTON Q. J. Geol. Soc. **80.**

Eurycotis similis **sp. n.** Antigua p. 22 fig., CAUDELL Univ. Iowa Studies N. H. **10** no. 1 1922.

Eushelfordia **gen. n.** for *Paratropes pica* Walk. p. 126, HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Holocompsa pusilla **sp. n.** Seychelles p. 354 figs., BOLIVAR Ann. Mag. N. H. (9) **13.**

Hololeptoblatta **gen. n.** p. 348, *pandanicola* p. 350, *minor* p. 352, **spp. n.** Seychelles figs., BOLIVAR Ann. Mag. N. H. (9) **13.**

Hoplophoropyga **gen. n.** p. 5, *babaulti* **sp. n.** Cape Colony p. 6 figs., CHOPARD Voy. Babault Afr. or. angl. **1921.**

Ischnoptera gardineri p. 321, *aldabrensis* p. 322 **spp. n.** Mascarene Is. figs., BOLIVAR Ann. Mag. N. H. (9) **13.**—*I. fulvastra* **sp. n.** Barkuda I. p. 168 fig., CHOPARD Rec. Ind. Mus. **26.**

Mareta acutiventris p. 168, *similis* p. 169, **spp. n.** Barkuda I. figs., CHOPARD t.c.—*M. depressiceps* p. 334, *acuticerca* p. 335, **spp. n.** Seychelles figs., BOLIVAR Ann. Mag. N. H. (9) **13.**

Margattea laxiretis p. 327, *crassivenosa* p. 328, *parvula* p. 330, *longicercata* p. 331, **spp. n.** Mascarene Is. figs., BOLIVAR t.c.

Onychostylus gardineri p. 339, *badius* p. 340, *zonatus* p. 341, *biplagiatus* p. 342, *labyrinthicus* p. 343, **spp. n.** Seychelles figs., BOLIVAR t.c.

Operculea **gen. n.** *crassiceps* **sp. n.** Mascarene Is. p. 323 figs., BOLIVAR t.c.

Panchlora irrorata **sp. n.** Ecuador p. 129 fig., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Panesthia key p. 647, *bakeri* p. 649, *mearnsi* p. 654 (with **var. n.** *uniformis* p. 655), **spp. n.** fig., Philippines, CAUDELL Phil. J. Sci. **24.**

Paratropes pica see *Eushelfordia.*

Periplaneta orientalis morphology and physiology of gizzard p. 281, EIDMANN Zs. wiss. Zool. **122**; morphology p. 1180, WOLF C.R. Soc. Biol. **91.**

Phileciton **gen. n.** *longipes* **sp. n.** Brazil pp. 131 & 186 fig., CHOPARD Bull. Soc. ent. Fr. **1924.**

Polyphaga syriaca **var. n.** *unicolor* Jerusalem p. 170, CHOPARD in BUXTON & UVAROV Bull. Soc. R. ent. Egypte **1923** 1924.

†*Striatotegmen* **gen. n.** *africanum* **sp. n.** Africa p. 331, HAUGHTON Ann. S. Afr. Mus. **12.**

Supella amoena **sp. n.** Amirantes p. 337, BOLIVAR Ann. Mag. N. H. (9) **13.**

Temnopteryx obliquetruncata **sp. n.** Barkuda I. p. 172 fig., CHOPARD Rec. Ind. Mus. **26.**

Theganopteryx scotti p. 315, *grisea*, *minuta* p. 316, *lunulata* p. 317, *reticulata* p. 318, *litturata* p. 319, **spp. n.** Seychelles, BOLIVAR Ann. Mag. N. H. (9) **13.**

MANTIDAE.

Notes on Mantidae of the Mascarene Is., BOLIVAR Ann. Mag. N. H. (9) **13** p. 356.

Food habits of praying mantis p. 185, FULLER Austral. Nat. **5.**

Review of Australian Mantidae—Part II, TINDALE Rec. S. Aust. Mus. **2** pp. 547–552 fig.

Acontiothespis ecuadorica **sp. n.** Ecuador p. 132 figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Calidomantis devylderi p. 2, *gyldenstolpei* p. 4, **spp. n.** C. Africa, SJÖSTEDT Ark. Zool. **16** no. 6.

Eremoplana infelix **n. n.** for *Mantis ocellata* Thnbg. p. 3, UVAROV Min. Agr. Egypt Bull. **41**; notes p. 40, ADAIR Bull. Soc. R. ent. Egypte **1923** 1924.

Hebardiella **gen. n.** (near *Hebardia*), *karnyi* **sp. n.** Sumatra p. 262, WERNER Treubia **5.**

Hierodula doveri **sp. n.** Barkuda I. p. 175, CHOPARD Rec. Ind. Mus. **26.**

Idolomorpha gracilis notes p. 42, ADAIR Bull. Soc. R. ent. Egypte **1923** 1924.

Ima **gen. n.** (near *Tropidomantis*) *fusca* **sp. n.** Queensland p. 549 fig., TINDALE Rec. S. Aust. Mus. **2.**

Luteomantis **gen. n.** for *Miomantis* (*Calidomantis*) *lutescens* Sjöst. p. 6, SJÖSTEDT Ark. Zool. **16** no. 6.

Mantis ocellata see *Eremoplana infelix.*

Miomantis lutescens see *Luteomantis.*

Neomantis hyalina **sp. n.** Australia p. 548 figs., TINDALE Rec. S. Aust. Mus. **2.**

Pyrgomantis nasuta **f. n.** *nana* C.Africa p. 2, SJÖSTEDT Ark. Zool. **16** no. 6.

Sinaiella **gen. n.** (near *Stenopyga*) p. 2, *nebulosa* **sp. n.** Sinai p. 3 fig., UVAROV Min. Agr. Egypt Bull. **41.**

Tarachodes minor **sp. n.** B. E. Afr. p. 25 fig., CHOPARD Voy. Babault Afr. or. angl. **1921.**

Zopheromantis **gen. n.** (near *Hierodula*) p. 550, *trimaculata* **sp. n.** S. Australia p. 551 fig., TINDALE Rec. S. Aust. Mus. **2.**

PHASMIDAE.

Acanthometriotes **gen. n.** *crassus* **sp. n.** Ecuador p. 139 fig., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Bacillus libanicus **n. n.** for *B. aegyptiacus* Pant. (nec Gray) p. 8 footnote, UVAROV Min. Agr. Egypt Bull. **41.**

Carausius (*Dixippus*) *morosus* teratology p. 549 figs., BRECHER Arch. mikr. Anat. Entwickl. **102**; intersexes p. 448, ROSTAND C.R. Soc. Biol. **91.**

Dyme annulicornis **sp. n.** Ecuador p. 145 figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Gratidia guilielmi p. 13, *canaliculata* p. 15, *subquadrata* p. 16, *digitalis* p. 17, *nubilipes* p. 18 **spp. n.** C. Africa fig., SJÖSTEDT Ark. Zool. **16** no. 6.

Holca infumata **sp. n.** Ecuador p. 135 figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Libethra camposi **sp. n.** Ecuador p. 143 figs., HEBARD t.c.

Paraprisopus spicatus **sp. n.** Ecuador p. 141 fig., HEBARD t.c.

Pseudophasma esmeraldas **sp. n.** Ecuador p. 136 figs., HEBARD t.c.

Trychopeplus thaumasius **sp. n.** Ecuador p. 148 figs., HEBARD t.c.

GRYLLIDAE.

Anaxipha annulipes p. 233, *fragilis* p. 235, *pictipennis* p. 237, *tatei* p. 240, **spp. n.** Ecuador figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Arachnomimus jacobsoni **sp. n.** Java p. 192 fig., CHOPARD Ann. Soc. ent. Fr. **93.**

†*Archaegryllodes* **gen. n.** for *stormbergensis* **sp. n.** Africa p. 336, HAUGHTON Ann. S. Afr. Mus. **12.**

Cycloptilum minimum **sp. n.** Antigua p. 40, CAUDELL Univ. Iowa Studies N. H. **10** no. 1 1922.

Gryllomorpha rufescens **sp. n.** Egypt p. 16, UVAROV Min. Agr. Egypt Bull. **41.**

Heterecous (?) *dubius* **sp. n.** Antigua p. 42, CAUDELL Univ. Iowa Studies N. H. **10** no. 1 1922.

Kempiella **gen. n.** (near *Arachnomimus*) *longipes* **sp. n.** Assam p. 87 figs., CHOPARD Rec. Ind. Mus. **26.**

Larandopsis **gen. n.** (near *Laranda*) *choprai* **sp. n.** Assam p. 86 figs., CHOPARD t.c.

Myrmecophila albicincta p. 184, *gracilipes* p. 185, **spp. n.** Barkuda I. figs., CHOPARD t.c.

Oecanthus pellucens mating and oviposition pp. 46–50 fig., SCHRÖDER Mitt. bad. ent. Ver. **1.**

Ornebius leucopygus p. 186, *annandalei* p. 187, **spp. n.** Barkuda I. fig., CHOPARD Rec. Ind. Mus. **26.**

Parendacustes **gen. n.** *cavicola* **sp. n.** Sumatra p. 190 fig., CHOPARD Ann. Soc. ent. Fr. **93.**

Paroecanthus hesperus **sp. n.** Ecuador p. 243 fig., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Phaeophilacris spectrum ♀ described B. E. Afr. p. 35 fig., CHOPARD Voy. Babault Afr. or. angl. **1921.**

Pteronemobius abruptus **sp. n.** Egypt p. 15 figs., UVAROV Min. Agr. Egypt Bull. **41.**—*P. gravelyi* **sp. n.** Barkuda I. p. 183 fig., CHOPARD Rec. Ind. Mus. **26.**

Rhipipteryx antennata p. 226, *nodicornis* p. 228, **spp. n.** Ecuador figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**—*R. chopardi* new sense organ p. 243 figs., WILLE Zool. Anz. **58**; movement and appendages p. 49 figs., WILLE op. cit. **61.**

Speonemobius **gen. n.** p. 84. *decoloratus* **sp. n.** Assam p. 85 figs., CHOPARD Rec. Ind. Mus. **26.**

TETTIGONIIDAE.

On Malayan Gryllacridinae, Meconeminae, Mecopodinae, Tympanophorinae and Pseudophyllinae, KARNY Treubia **5** pp. 19–205 figs.

Notes on genera and spp. of Decticinae and Tettigoniinae in Brit. Mus., synonymy, UVAROV Trans. Ent. Soc. Lond. **1923** p. 492.

Amblycorypha rotundifolia brachyptera Ball (= *isleyi* Caud.), p. 180, CAUDELL Proc. Ent. Soc. Wash. **26.**

Amytta, key to Malayan p. 124, *serricauda* p. 125, *nigrivertex* p. 126, *nigrigutta* p. 127 Sumatra, *keyica* Kei Is. p. 128, *longicauda* Philippines p. 130, *giglio-tosi* Java p. 131, *werneri* Sumatra p. 132 fig. **spp. n.**, KARNY Treubia **5.**—*A. delicatula* **sp. n.** Barkuda I. p. 177, CHOPARD Rec. Ind. Mus. **26.**

Anarytropteris **gen. n.** (near *Arytropteris*) *fallax* **sp. n.** Nyasaland p. 506 figs., UVAROV Trans. Ent. Soc. Lond. **1923.**

Anaulacomera ecuadorica p. 201, *poculigera* p. 202, **spp. n.** Ecuador figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Anommatoptera **gen. n.** p. 520, *manifesta* p. 521, *ingens* p. 522, **spp. n.** Mexico, VIGNON Bull. Mus. Hist. nat. Paris **1923.**

Arytropteris, key to allied genera p. 503, UVAROV Trans. Ent. Soc. Lond. **1923.**

Atlanticus synonymy p. 510, *palpalis* Rehn & Heb. ♂ described, *sinensis* **sp. n.** China p. 512 figs., UVAROV t.c.

Bliastes ecuadorica **sp. n.** Ecuador p. 211, HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Brunnea transversalis **sp. n.** Borneo p. 181 fig., KARNY Treubia **5.**

Bucephaloptera **gen. n.** for *Olynthoscelis bucephala* Br. p. 256, EBNER Konowia **2.**

Camposiella **gen. n.** p. 216, *notabilis* **sp. n.** Ecuador p. 217 figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Ceuthophilus carlsbadensis p. 217, *longipes* p. 219 **spp. n.** New Mexico, CAUDELL Proc. Ent. Soc. Wash. **26.**

Characta rehnii **sp. n.** Borneo p. 151 fig., KARNY Treubia **5.**

Chloroscirtus simplex **sp. n.** Ecuador p. 198 figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Coelophyllum Scud. (= *Prosagoga* Brunner) *lineamentis* Costa Rica p. 304, *insigne* Fr. Guiana p. 305 **spp. n.**, VIGNON Bull. Mus. Hist. nat. Paris **1924.**

Cratioma aberratum **sp. n.** p. 171 fig., KARNY Treubia **5.**

Dichopetala andeana **sp. n.** Ecuador p. 195 figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Diestrammena brevifrons **subsp. n.** *frieli, caeca* **sp. n.** Assam p. 83 figs., CHOPARD Rec. Ind. Mus. **26.**

Disceratus immanis **sp. n.** Ecuador p. 214 figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Gampsocleis inflata **sp. n.**, *gratiosa* **subsp. n.** *infuscata* China p. 525 fig., UVAROV Trans. Ent. Soc. Lond. **1923.**

Gryllacris hieroglyphicoides p. 179, *barkudensis* p. 180, **spp. n.** Barkuda I. figs., CHOPARD Rec. Ind. Mus. **26.**—*G. leefmansi* Moluccas p. 69, *cyclopimontana* New Guinea p. 75 **spp. n.**, *marginata* **subsp. n.** *carlii* Borneo p. 79, *ouwensi* Java p. 84, *buruensis* Buru p. 86 **spp. n.**, *lineolata* **subsp. n.** *menzeli* Bandoeng p. 89, *palabuana* **sp. n.** Java p. 95, *horváthi* **subsp. n.** *ceramensis* p. 96, *ebneri* **sp. n.** p. 97 Ceram, key p. 208, list of species p. 212, *sphegidipraeda* p. 215 **sp. n.**, *macilenta* **subsp. n.** *siebersi* p. 219, *modiglianii* **subsp. n.** *benkulensis* p. 226, *jacobsonii* p. 222, *hanitschi* p. 227, *willemsei* p. 229, **spp. n.** Sumatra figs., KARNY Treubia **5.**

Habetia defoliaria **sp. n.** New Britain p. 35 fig., UVAROV Bull. Ent. Res. **15.**

Hemictenodecticus algericus **sp. n.** Algeria p. 515 figs., UVAROV Trans. Ent. Soc. Lond. **1923.**

Lamprophyllum **gen. n.** p. 204, *micans* **sp. n.** Nicaragua p. 205 fig., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Lipotactes vittifemur p. 162, *azuriventer* p. 163, **spp. n.** Sumatra, KARNY Treubia **5.**

Macrolyristes regalis p. 155, *corporalis* p. 156, **spp. n.** Sumatra fig., KARNY t.c.

Meconemopsis borellii **sp. n.** Tjibodas p. 134 fig., KARNY t.c.

Metrioptera moldavica Moldavia p. 530, *karnyana* Herzegovina p. 532, *ambitiosa* Macedonia p. 533, *pylnovi* Caucasus p. 534, **spp. n.** figs., UVAROV Trans. Ent. Soc. Lond. **1923.**

Microprion temnophylloides **sp. n.** p. 185 fig., KARNY Treubia **5.**

Mimetica imperatrix **sp. n.** Ecuador p. 218 figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**—*M. angulosa* Guatemala p. 209, *expansa* Costa Rica p. 210, **spp. n.**, VIGNON Bull. Mus. Hist. nat. Paris **1924.**—*M. tuberata* **sp. n.** Costa Rica p. lxvi, VIGNON Trans. Ent. Soc. Lond. **1924.**

Mossula caudelli **sp. n.** Ceram p. 149, KARNY Treubia **5.**

Neanias javanicus Java p. 103, *subapterus* Sumatra p. 232, **spp. n.**, KARNY t.c.

Olynthoscelis bucephala see *Bucephaloptera.*

Papuaistus griffinii p. 32, *pallicrus* p. 33, **spp. n.** New Guinea fig., KARNY t.c.

Phaneroptera synonymy p. 9, UVAROV Min. Agr. Egypt Bull. **41.**—*P. quadripunctata, falcata* oviposition p. 186, GRASSÉ & VICHET Bull. Soc. ent. Fr. **1924.**

Phlesirtes brachiatus **sp. n.** E. Africa p. 510 figs., UVAROV Trans. Ent. Soc. Lond. **1923.**

Phlugis buruensis **sp. n.** Buru p. 109, KARNY Treubia **5.**

Phrictidea longicauda **sp. n.** Ceram p. 144, KARNY t.c.

Phyllomimus purpuratus **sp. n.** Sumatra p. 190, KARNY t.c.

Phylloptera octonotata **sp. n.** Ecuador p. 203 fig., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Prosagoga see *Coelophyllum.*

Pseudophyllomimus **gen. n.** *bruneri* **sp. n.** Borneo p. 192 fig., KARNY Treubia **5.**

Pseudophyllus prasinus **var. n.** *fenestrata* Java p. 171, KARNY t.c.

Pseudotanusia **gen. n.** p. 570, *elegans* no locality p. 573 (fig.), *pusilla*, p. 572, *mutila* p. 575 Brazil **spp. n.**, *pictifolia* **varr. n.** *pallida* S. America p. 572, *putris* no locality p. 573, VIGNON Bull. Mus. Hist. nat. Paris **1923.**

Psorodonotus revision p. 249, *fieberi* **subsp. n.** *illyricus* p. 251 Balkans, *uvarovi* **sp. n.** Armenia p. 251 figs., EBNER Konowia **2** 1923.

Pycnopalpa angusticordata **sp. n.** Fr. Guiana p. 302, VIGNON Bull. Mus. Hist. nat. Paris **1924.**

Rhacocleis bidens **sp. n.** Egypt p. 11 figs., UVAROV Min. Agr. Egypt Bull. **41.**

Rhaphidophora, key to Malayan p. 35, *obesa* Djampang p. 38, *chopardi* Borneo p. 40, *dammermani* Java p. 41, *brevicauda* Sumatra, *brevipes* Sebesi p. 43, *marmorata* p. 44, *obtuselaminata* p. 46 Java **spp. n.** figs., KARNY Treubia **5**.

Rhodopteryx elongata **sp. n.** Colombia p. 307, VIGNON Bull. Mus. Hist. nat. Paris **1924**.

Saga gracilipes **sp. n.** Palestine p. 179, UVAROV Bull. Soc. R. ent. Egypte **1923** 1924.

Sathrophyllia carinata **sp. n.** Barkuda I. p. 178 fig., CHOPARD Rec. Ind. Mus. **26**.

Schedocentrus **gen. n.** p. 209, *liparochrus* **sp. n.** Ecuador p. 210 fig., HEBARD Proc. Acad. Nat. Sci. Philad. **76**.

Sphodrophoxus **gen. n.** p. 221, *jivarus* **sp. n.** Ecuador p. 222 figs., HEBARD t.c.

Syntechna angulata **sp. n.** Ecuador p. 207 figs., HEBARD t.c.

Tanusia versicolor p. 438, *media* p. 440, *crassivenosa*, *signata* p. 441, *subtilis* p. 515, *rubroocellata* p. 518, *corrupta* p. 519 **spp. n.**, *brullaei* **varr. n.** *subintacta*, *crassiocellata* p. 436 (fig.), *decorata* **var. n.** *media* p. 440, *cristata* **var. n.** *picta* p. 516, *colorata* **var. n.** *inquinata* p. 518, S. America, VIGNON Bull. Mus. Hist. nat. Paris **1923**.

Temnophyllus sjöstedti **sp. n.** Borneo p. 183 fig., KARNY Treubia **5**.

Tettigonia orientalis **sp. n.** Japan p. 494 figs., UVAROV Trans. Ent. Soc. Lond. **1923**.

Tympanoptera angustissima p. 196, *annulata* p. 198, *uvarovii* p. 200, **spp. n.** New Guinea figs., KARNY Treubia **5**.

Typhoptera schulthessi **sp. n.** Borneo p. 204, KARNY t.c.

Typophyllum egregium **sp. n.** Ecuador p. 219 figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76**.

Xiphidiopsis, key to Malayan p. 110, *abbreviata* p. 112 Sumatra, *picta* p. 113 Java, *hebardi* p. 114, *bolivari* p. 116, *sumatrensis* p. 117, *punctata* p. 118 Sumatra, *nebulosa* p. 119 Dutch E. Indies, *redtenbacheri* p. 120 Java, *monstrosa* p. 121 Sumatra, *kraussi* p. 122 Java, **spp. n.**, KARNY Treubia **5**.

ACRIDIDAE.

List of Acrididae of China, CHANG China J. Sci. & Arts **2** p. 64.

Notes on the early stages of grasshoppers, CRIDDLE Can. Ent. **56** pp. 49–53.

Key to genera of Proscopinae, revision, HEBARD Proc. Acad. Nat. Sci. **76** p. 160.

Studies in Japanese Acrididae, HEBARD Trans. Amer. Ent. Soc. **50** pp. 209–224 figs.

Notes on the N. American Scyllinae (Acridinae), HEBARD Trans. Amer. Ent. Soc. **50** pp. 157–161 1 pl.

The Oedipodinae of Utah with keys and summary of world distribution and list of Orthoptera recorded for the State, HENDERSON Utah Agric. Expt. Sta. Bull. **191** 150 pp. 6 pls.

Biology of N. American Acrididae, MORSE Carnegie Inst. Wash. Pubn. no. **18** 1904 55 pp. figs.

Acanthacris key p. 14 figs., UVAROV Ann. Mag. N. H. (9) **13**.

Acrida crassicollis **sp. n.** B. E. Afr. p. 44, CHOPARD Voy. Babault Afr. or. angl. **1921**.—*A. turrita* development pp. 1–3, KARNY Treubia **5**.

Acridium radama see *Finotina*.—*A. anguliferum* see *Kraussaria*.—*A. roseum* see *Chondracris*.

Agriacris magnifica **sp. n.** Ecuador p. 177 figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76**.

Amblytropidia stoneri **sp. n.** Antigua p. 32, CAUDELL Univ. Iowa Studies N. H. **10** no. 1 1922.

Ampelophilus **gen. n.** (near *Anniceris*) for *Anniceris meridionalis* Bruner etc. p. 127, HEBARD Trans. Amer. Ent. Soc. **50**.

Anchotatus ecuadoricus p. 165, *bispinosus* p. 166, **spp. n.** Ecuador figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76**.

Anniceris geniculatus, *truncatus*, *viridulus*, *meridionalis*, *apicalis* see *Ampelophilus*.

Aphantotropis **gen. n.** *connectens* **sp. n.** Angola p. 617, UVAROV Ann. Mag. N. H. (9) **14**.

Arcyptera, list and distribution of spp., synonymy, p. 242, UVAROV Ann. Mag. N. H. (9) **13.**

Austracris key p. 2, *guttulosa* **subspp. n.** *nana* Friendly Is., Samoa, *gracilis* Australia p. 4, UVAROV Ann. Mag. N. H. (9) **13.**

Betiscoides **gen. n.** (near *Betisca* Sjöst.) p. 12, *meridionalis* **sp. n.** S. Africa p. 14 fig., SJÖSTEDT Ark. Zool. **15** no. 22.

Bryodema capsitana see *Vosseleria.*

Cannula, key p. 2, *sulcata* Sudan, Niger p. 5, *albovittata*, *lamani* p. 7, *tesselata* p. 8, *fenestrata* p. 9 Congo **spp. n.** figs., SJÖSTEDT Ark. Zool. **15** no. 21.

Caryanda key p. 156, *platycerca* Ceylon p. 157, *pumila* Sumatra p. 158, **spp. n.** fig., WILLEMSE Tijd. Ent. **67.**

Catantops rehni p. 16, *bokoënsis* p. 17, **spp. n.** Congo, SJÖSTEDT Ark. Zool. **15** no. 22.

Cephalocoema tridens **sp. n.** Peru p. 171 fig., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Chiriquia mirifica **sp. n.** Ecuador p. 155, figs., HEBARD t.c.

Chondracris key p. 106, *rosea* **subsp. n.** *brunneri* Java p. 108, UVAROV Ann. Mag. N. H. (9) **14.**

Colpolopha camposi **sp. n.** Ecuador p. 179 fig., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Conozoa constricta **sp. n.** Utah p. 75, HENDERSON Utah Agric. Expt. Sta. Bull. **191.**

Copiocera harroweri **sp. n.** Panama p. 120 figs., HEBARD Trans. Amer. Ent. Soc. **50.**

Cyrtacanthacris aeruginosa **subsp. n.** *unicolor* Gold Coast p. 101, UVAROV Ann. Mag. N. H. (9) **14.**

Devylderia **gen. n.** p. 11, *coryphistoides* **sp. n.** S. Africa p. 12 fig., SJÖSTEDT Ark. Zool. **15** no. 22.

Dociostaurus femoro-tibial articulation p. 162 fig., SEMICHON Bull. Soc. ent. Fr. **1924.**—*D. cephalotes* **sp. n.** Galilee p. 187 fig., UVAROV Bull. Soc. R. ent. Egypte **19231924.**

Finotina key p. 104 fig., UVAROV Ann. Mag. N. H. (9) **14.**

Glaphyra see *Ornithacris.*

Gonyacanthella concolor **sp. n.** Congo p. 15 fig., SJÖSTEDT Ark. Zool. **15** no. 22.

Gowdeya picta **n. n.** for *ugandana* p. 111, UVAROV Ann. Mag. N. H. (9) **14.**

Helioscirtus redescription p. 29, UVAROV Konowia **2** 1923.—*H.*, key p. 31, *gravesi* **sp. n.** Egypt p. 30 figs., UVAROV Min. Agr. Egypt Bull. **41.**

Hemierianthus pedestris **sp. n.** Congo p. 2 fig., SJÖSTEDT Ark. Zool. **15** no. 22.

Ischnacrida elegans **sp. n.** B. E. Afr. p. 57 figs., CHOPARD Voy. Babault Afrique or. angl. **1921.**

Kraussaria key p. 102, UVAROV Ann. Mag. N. H. (9) **14.**

Leuconotus gorgasi **sp. n.** Panama p. 97 figs., HEBARD Trans. Amer. Ent. Soc. **50.**

Locusta migratoria breeding experiments pp. 241–243, PLOTNIKOV Bull. Ent. Res. **14.**

Lophacris gloriosa **sp. n.** Panama p. 104 figs., HEBARD Trans. Amer. Ent. Soc. **50.**

Mecostethus revised list, distribution and synonymy p. 247, UVAROV Ann. Mag. N. H. (9) **13.**

Microtylopteryx nigrigena **sp. n.** Panama p. 137 figs., HEBARD Trans. Amer. Ent. Soc. **50.**

Nomadacris septemfasciata phases p. 7, UVAROV Ann. Mag. N. H. (9) **13.**

Odontomelus olivascens **sp. n.** Congo p. 8, SJÖSTEDT Ark. Zool. **15** no. 22.

Opaon tatei **sp. n.** Ecuador p. 194 figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Opshomala goethalsi **sp. n.** Panama p. 117 figs., HEBARD Trans. Amer. Ent. Soc. **50.**

Ornithacris **n. n.** for *Glaphyra* p. 9 figs., UVAROV Ann. Mag. N. H. (9) **13.**

Otumba incompta **sp. n.** Ecuador p. 153 fig., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**—*O. aciculata* **sp. n.** Panama p. 84 figs., HEBARD Trans. Amer. Ent. Soc. **50.**

Pantelia babaulti **sp. n.** B. E. Afr. p. 40 figs., key p. 43, CHOPARD Voy. Babault Afr. or. angl. **1921.**

Paramastax annulipes **sp. n.** Ecuador p. 158 figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Parapetasia rammei **sp. n.** Kamerun p. 10 fig., SJÖSTEDT Ark. Zool. **15** no. 22.

Parapleurus revised list, distribution and synonymy p. 246, UVAROV Ann. Mag. N. H. (9) **13.**

Parasphena albini **sp. n.** B. E. Afr. p. 54 fig., CHOPARD Voy. Babault Afr. or. angl. **1921.**

Penichrotes meridionalis **sp. n.** S. Africa p. 6 fig., SJÖSTEDT Ark. Zool. **15** no. 22.

Phaeoparia gracilis **sp. n.** Ecuador p. 186 figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Phloeobida abbreviata **sp. n.** B. E. Afr. p. 48 figs., CHOPARD Voy. Babault Afr. or. angl. **1921.**

Phymateus hildebrandti anatomy, dermal secretion 28 pp. fig., PAWLOWSKY in DOGIEL & SOKOLOW Sci. Results Zool. Exped. B. E. Afr. & Uganda in 1914 **1** 1916 no. 3. (Also in Russian.)

Platypterna aegyptia **sp. n.** Egypt p. 18 figs., UVAROV Min. Agr. Egypt Bull. **41.**

Platytettix harroweri p. 81, *panamae* p. 83, **spp. n.** Panama figs., HEBARD Trans. Amer. Ent. Soc. **50.**

Podisma subaptera **sp. n.** Japan p. 221 fig., HEBARD Trans. Amer. Ent. Soc. **50.**

Poecilocloeus rhabdotus **sp. n.** Panama p. 123 fig., HEBARD Trans. Amer. Ent. Soc. **50.**

Pseudobacteria pastazae **sp. n.** Ecuador p. 150 figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Quitus **gen. n.** p. 182, *insolens* **sp. n.** Ecuador p. 183, HEBARD t.c.

Ramburiella distribution, revised list and synonymy p. 245, UVAROV Ann. Mag. N. H. (9) **13.**

Rhicnoderma magnificum **sp. n.** Panama p. 110 figs., HEBARD Trans. Amer. Ent. Soc. **50.**

Scyllina viatoria viatoria synonymy p. 159 fig., HEBARD Trans. Amer. Ent. Soc. **50.**

Sitalces rubripes **sp. n.** Ecuador p. 190 fig., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Sphingonotus coerulans corsicus **n. n.** for *coeruleipes* Chopard (nec Uv.) p. 310, CHOPARD Ann. Soc. ent. Fr. **92.**—*S. coerulans* **subsp. n.** *theodori* p. 195, *hierichonicus* **sp. n.** p. 198 Palestine fig., UVAROV Bull. Soc. R. ent. Egypte **1923** 1924.—*S. pictus* redescribed p. 28 figs., UVAROV Min. Agr. Egypt Bull. **41.**

Stenobothrus respiratory system p. 376 figs., DU BUISSON Bull. Acad. roy. Belg. (5) **10.**

Taeniophora panamae **sp. n.** Panama p. 107 figs., HEBARD t.c.

Taeniopoda revision and key pp. 253–274, HEBARD Trans. Amer. Ent. Soc. **50.**

Thericles lycaon Congo p. 3, *kanga* Kilimandjaro p. 4 **spp. n.** fig., SJÖSTEDT Ark. Zool. **15** no. 22.

Tmethis aegyptius **n. n.** for *carinata* Serv. p. 34 fig., UVAROV Min. Agr. Egypt Bull. **41.**

Trimerotropis viriditibialis **sp. n.** Utah p. 104, HENDERSON Utah Agric. Expt. Sta. Bull. **191.**

Tylotettix simplex **sp. n.** Panama p. 79 figs., HEBARD Trans. Amer. Ent. Soc. **50.**

Urubamba ecuadorica **sp. n.** Ecuador p. 185 fig., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

Vilerna corticina **sp. n.** Panama p. 132 fig., HEBARD Trans. Amer. Ent. Soc. **50.**

Vosseleria **gen. n.** type *Bryodema capsitana* Bonnet p. 29, *somali* p. 29, *schulthessi* p. 30 **spp. n.** Somaliland, UVAROV Konowia **2** 1923.

Vosseleriana **gen. n.** for *Helioscirtus fonti* Bol. p. 31, UVAROV Bull. Min. Agr. Egypt **41.**

Xenacris **gen. n.** p. 173, *platyceps* **sp. n.** Ecuador p. 174 figs., HEBARD Proc. Acad. Nat. Sci. Philad. **76.**

THYSANURA.

Notes on Thysanura of France, DENIS Arch. Zool. **62** p. 287.

Thysanoures de France et de la Faune européenne—I, HOULBERT Paris Doin 1924 382 pp. 9 pls. 87 figs.

Primitive Thysanura in New Zealand, TILLYARD N. Z. J. Sci. & Tech. **7** pp. 232–242 10 figs.

Campodea philpotti **sp. n.** New Zealand p. 242 fig., TILLYARD t.c.

Heterojapyx gallardi **sp. n.** New Zealand p. 242 fig., TILLYARD t.c.

Heterolepisma intermedia **sp. n.** Galapagos p. 67 fig., FOLSOM Zoologica **5.**

Nesomachilus **gen. n.** *maoricus* **sp. n.** New Zealand p. 241 figs., TILLYARD N. Z. J. Sci. & Tech. **7.**

Nicoletia corsica **spp. n.** Corsica p. 174 figs., CHOPARD Bull. Soc. ent. Fr. **1924.**

Notolepisma **gen. n.** *zealandica* **sp. n.** New Zealand p. 241 fig., TILLYARD N. Z. J. Sci. & Tech. **7.**

Tetrodontophora gigas autohaemorrhage p. 238 figs., KONČEK Zool. Anz. **61.**

COLLEMBOLA.

Collembola of the Siju Cave, Assam, CARPENTER Rec. Ind. Mus. **26** pp. 285–289 figs.

Collembola of the Paris Museum, DENIS Ann. Soc. ent. Fr. **93** pp. 211–260 figs.

Catalogue of Collembola of France p. 289, synonymy and other notes, DENIS Arch. Zool. **62** p. 253 figs.

Notes on Zygentoma of France, DENIS Arch. Zool. **62** p. 289.

Notes on Collembola of Java and Sumatra, FOLSOM Bull. Mus. Comp. Zoöl. **65** p. 505 figs.

Ecology and bionomics of Collembola in Switzerland, HANDSCHIN Verh. Natf. Ges. Basel **35** p. 71.

The food of Collembola, MACNAMARA Can. Ent. **56** pp. 99–105 figs.

Catalogue of Apterygogenea of Hungary, VELLAY Fauna Regni Hung. Apterygogenea 1918 pp. 19–22.

List of Apterygota of South West England, WOMERSLEY Ann. Rept. Proc. Bristol Nat. Soc. (4) **6** p. 28.

Achorutes Templeton (= *Hypogastrura* Bourlet) p. 505, *consanguineus* **sp. n.** p. 506 Java figs., FOLSOM Bull. Mus. Comp. Zoöl. **65.**

Archisotoma besselsi see *Isotoma pulchella.*

Chondrachorutes wahlgreni **sp. n.** France p. 219 fig., DENIS Ann. Soc. ent. Fr. **93.**

Cyphoderopsis gracilis **sp. n.** Siju Cave, Assam p. 288 fig., CARPENTER Rec. Ind. Mus. **26.**

Cyphoderus silvestrii **sp. n.** France p. 199, DENIS Bull. Soc. ent. Fr. **1924.**—*C. bidenticulatus* **var. n.** *veneris* France p. 282 figs., DENIS Arch. Zool. **62.**—*C. orientalis* **sp. n.** Sumatra p. 513 figs., FOLSOM Bull. Mus. Comp. Zoöl. **65.**

Deuterosminthurus lacazei **sp. n.** France p. 199, DENIS Bull. Soc. ent. Fr. **1924.**

Dicranocentrus bicolor p. 23, *termitophilus* p. 25, **spp. n.** Brazil, HANDSCHIN N. Beitr. syst. Ins. **3.**

Drepanocyrtus reichenspergeri **sp. n.** Brazil p. 17 fig., HANDSCHIN t.c.

Entomobrya dollfusi no locality p. 232, *eburnea* Ivory Coast p. 235, *inaequalis* Brazil p. 236, **spp. n.** fig., DENIS Ann. Soc. ent. Fr. **93.**—*E. nigrocincta* **sp. n.** France p. 261 figs., DENIS Arch. Zool. **62.**—*E. ligata* p. 3, *mineola* p. 5, *assuta* p. 6, **spp. n.** New York figs., FOLSOM Amer. Mus. Novit. no. **108.**—*E. proxima* **sp. n.** Sumatra p. 507 figs., FOLSOM Bull. Mus. Comp. Zoöl. **65.**—*E. wasmanni* **sp. n.** Brazil p. 14 fig., HANDSCHIN N. Beitr. syst. Ins. **3.**

Heteromurus major redescribed p. 276 fig., DENIS Arch. Zool. **62.**

Hypogastrura concolor **var. n.** *setosa* Novaya Zemlya p. 7 figs., SCHÖTT Rept. Norw. Exp. Nov. Zeml. no. 12 1923.—*H. manubrialis* Tullb. see *Podurhippus pityriasicus* Megnin.

Isotoma pulchella Moniez (= *Archisotoma besselsi* Pack.) p. 197, DENIS Bull. Soc. ent. Fr. **1924.**—*I. immersa* **sp. n.** New York p. 1 fig., FOLSOM Amer. Mus. Novit. no. **108.**

Lepidocyrtinus pulcher **sp. n.** Brazil p. 15 fig., HANDSCHIN N. Beitr. syst. Ins. **3.**

Lepidocyrtus magnificus p. 285, *exploratorius* p. 286, **spp. n.** Assam fig., CARPENTER Rec. Ind. Mus. **26.**—*L. vandeli* **sp. n.** France p. 274 figs., DENIS Arch. Zool. **62.**—*L. geayi* **sp. n.** Guiana p. 258 fig., DENIS Ann. Soc. ent. Fr. **93.**—*L. parallelus* p. 508, *setosus* p. 509, **spp. n.** Sumatra figs., FOLSOM Bull. Mus. Comp. Zoöl. **65.**—*L. cyaneus* **var. n.** *cinereus* p. 9, *violentus* **sp. n.** p. 10 New York State figs., FOLSOM Amer. Mus. Novit. no. **108.**—*L. intermixdus* **sp. n.** Galapagos p. 75 fig., FOLSOM Zoologica **5.**

Mastigoceras **gen. n.** *camponoti* **sp. n.** Brazil p. 22, HANDSCHIN t.c.

Onychiurus handschini, argus, **spp. n.** France p. 197, DENIS Bull. Soc. ent. Fr. **1924.**

Orchesella ainsliei **sp. n.** New York p. 6 figs., FOLSOM Amer. Mus. Novit. no. **108.**

Papirioides **gen. n.** p. 514, *jacobsoni* **sp. n.** Sumatra p. 515 fig., FOLSOM Bull. Mus. Comp. Zoöl. **65.**

Paronella brunnea **sp. n.** Assam p. 287 fig., CARPENTER Rec. Ind. Mus. **26.**—*P. segmentata* **sp. n.** Sumatra p. 511 fig., FOLSOM Bull. Mus. Comp. Zoöl. **65.**—*P. hirtipes* **sp. n.** Brazil p. 21 fig., HANDSCHIN N. Beitr. syst. Ins. **3.**

Podurhippus pityriasicus Megnin (= *Hypogastrura manubrialis* Tullb.) p. 197, DENIS Bull. Soc. ent. Fr. **1924.**

Proisotoma richardi **sp. n.** Monaco p. 228 fig., DENIS Ann. Soc. ent. Fr. **93.**

Pseudachorutes handschini Ethiopia p. 221, *carli* Guiana p. 222, **spp. n.** fig., DENIS t.c.

Pseudosinella decipiens, sollaudi **spp. n.** France p. 198, DENIS Bull. Soc. ent. Fr. **1924.**—*P. brevicornis* **sp. n.** Brazil p. 19 fig., HANDSCHIN N. Beitr. syst. Ins. **3.**

Sira obscuripennis Phillipeville p. 239, *maclaudi* Fr. Guinea p. 242, *coerulea* p. 243, *pseudocoerulea* p. 244, Ethiopia **spp. n.,** *flavovirens* **var. n.** *brevidentata* Ivory Coast p. 245, *subdomestica* Ethiopia p. 249, *lesnei* Algeria p. 251, *gibbosa* Japan p. 253, *ethiopica* Ethiopia p. 255, **spp. n.** fig., DENIS Ann. Soc. ent. Fr. **93.**—*S. banyulensis* **sp. n.** France p. 198, DENIS Bull. Soc. ent. Fr. **1924.**—*S. dollfussi* **var. n.** *pallens* France p. 268, DENIS Arch. Zool. **62.**

Tomocerus catalanus **sp. n.** France p. 198, DENIS Bull. Soc. ent. Fr. **1924.**

Willowsia platani **var. n.** *platanoides* France p. 263, DENIS Arch. Zool. **62.**

Xenylla subwelchi **sp. n.** Monaco p. 216 fig., DENIS Ann. Soc. ent. Fr. **93.**

PROTURA.

Acerentomon key p. 46, *floridanum* **sp. n.** Florida p. 44, EWING Ent. News **35.**

XII. PROCHORDATA

INCLUDING

ENTEROPNEUSTA AND PTEROBRANCHIA

BY

J. R. NORMAN

CONTENTS.

	PAGE
I. Titles	1
II. Subject Index	3
III. Systematic Index	4

I.—TITLES.

1.—Ärnbäck-Christie-Linde, A. A remarkable Pyurid Tunicate from Novaya Zemlya. Ark. Zool. Stockholm **16** No. 15 1924 7 pp. 6 figs.

2.—Ärnbäck - Christie - Linde, A. Notes on *Botrylloides aurea* M. Sars. Nyt Mag. Naturv. Kristiania **61** 1924 pp. 285–293.

3.—Bückmann, A. Bemerkungen über Appendicularien aus der Ausbeute der Deutschen Südpolarexpedition. Zool. Anz. Leipzig **59** 1924 pp. 205–212.

4.—Cunningham, J. T. Experiments on *Ciona intestinalis.* Nature London **113** 1924 p. 84.

5.—Essenberg, C. E. The incomplete digestive tract of *Appendicularia sicula.* Univ. Cal. Pub. Zool. Berkeley **26** 1924 pp. 263–265 1 fig.

6.—Evans, A. Structure of *Dolichoglossus pusillus.* J. Ent. Zool., Claremont, Cal. **11** 1919 pp. 28–29 3 pls.

7.—Fedele, M. Identitá fra *Dolchinia mirabilis* Korotneff e *Doliolum Chuni* Neumann. Boll. Soc. nat. Napoli **35** 1924 pp. 152–158.

8.—Fox, H. M. Note on Kammerer's experiments with *Ciona* concerning the inheritance of an acquired character. J. Genetics Cambridge **14** 1924 pp. 89–91 1 pl.

9.—Franz, V. Lichtsinnversuche am Lanzettfisch zur Ermittelung der Sinnesfunktion des Stirn-oder Gehirnbläschens. Wiss. Meeresunters. Kiel Abt. Helgoland **15** 1923–24 No. 14 19 pp. 9 figs.

10.—Franz, V. Versuche zur Ermittelung der Sinnesfunktion des " Gehirnbläschens " des Lanzettfisches (*Branchiostoma lanceolatum* [Pall.], *Amphioxus*). Verh. D. zool. Ges. Berlin **29** 1924 pp. 42–43.

11.—Grave, C. and **Woodbridge,** H. *Botryllus schlosseri* (Pallas): the behavior and morphology of the free-swimming larva. J. Morph. Philadelphia **39** 1924 pp. 207–247 5 pls. 8 text-figs.

12.—Harant, H. Notes ascidiologiques. I.—A propos d'une variété nouvelle d '*Aplidium caeruleum* Lahille. Bul. soc. zool. Paris **49** 1924 pp. 257–260.

13.—Harant, H. Notes ascidiologiques. II.—Liste d'ascidies provenant des îles Chausey. Bul. soc. zool. Paris **49** 1924 pp. 260–261.

14.—Hartmeyer, R. Etwas über Schreibungen von Gattungsnamen. Mitt. Zool. Mus. Berlin **10** 1922 pp. 325–331.

15.—Hartmeyer, R. Ascidiacea, part I. Zugleich eine Übersicht über die Arktische und boreale Ascidienfauna auf tiergeographischer Grundlage. Danish Ingolf- Exped. Copenhagen **2** pt. 6 1923 365 pp. 1 pl. 35 text-figs.

15a.—Hartmeyer, R. Ascidiacea, part II. Zugleich eine Übersicht über die Arktische und boreale Ascidienfauna auf tiergeographische Grundlage. Danish Ingolf- Exped. Copenhagen **2** pt. 7 1924 275 pp. 45 text-figs.

16.—Hecht, S. The photic sensitivity of *Ciona intestinalis*. J. Gen. Physiol. New York **1** 1919 pp. 147–166.

17.—Hilton, W. A. The central nervous system of *Dolichoglossus*. J. Ent. Zool. Claremont Cal. **11** 1919 pp. 59–60 1 pl.

18.—Horst, C. J. van der. Bijdragen tot de kennis der fauna van Curaçao. Resultaten einer Reis van Dr. C. J. van der Horst in 1920. West-Indische Enteropneusten. Bijdr. Dierk. Amsterdam **23** 1924 pp. 33–58 pls. iv–vii.

19.—Huntsman, A. G. The genera of simple ascidians of Savigny and Fleming, with remarks on nomenclature. Trans. Canad. Inst. Toronto **14** 1923 pp. 197–204.

20.—Lahille, F. Presencia de *Corella eumyota* Traust., en Arica. Rev. Chilena Santiago **25** 1923 pp. 221–224 pl. xvii.

21.—Ledig, R. General structure of *Phoronis pacifica* Torrey. J. Ent. Zool. Claremont Cal. **11** 1919 pp. 55–57 1 pl.

22.—MacBride, E. W. Experiments on *Ciona intestinalis*. Nature London **113** 1924 p. 196.

23.—Marco, F. Nuovo organo di senso nei Salpidae. Monitore zool. ital. Firenze **31** 1920 pp. 10–21 pl. II.

24.—Meek, A. Plankton investigations, 1921–22. III.—Marine Plankton (10) Tunicata. Rep. Dove Mar. Lab. Cullercoats **12** 1923 p. 140.

25.—Michaelsen, W. Die Botrylliden und Didemniden der Nordsee und der zur Ostsee führenden Meeresgebiete. Wiss. Meeresunters., Kiel Abt. Helgoland **14** 1923 pp. 97–124 7 figs.

26.—Morgan, T. H. Self-fertility in *Ciona* in relation to cross-fertility. J. Exp. Zool. Philadelphia **40** 1924 pp. 301–305.

27.—Morgan, T. H. Dilution of sperm suspensions in relation to cross-fertilization in *Ciona*. J. Exp. Zool. Philadelphia **40** 1924 pp. 307–310.

28.—Peacock, A. D. Plankton investigations, 1921–22. III.—Marine Plankton. (9) Enteropneusta. Rep. Dove Mar. Lab. Cullercoats **12** 1923 pp. 136–139 2 figs.

29.—Prenant, M. Reproduction artificielle approximative des formes spiculaires de quelques Didemnidés. Bul. soc. zool. Paris **49** 1924 pp. 113–116.

30.—Simkins, C. S. Origin of the germ cells in *Ecteinascidia*. J. Morph. Philadelphia **39** 1924 pp. 295–321 2 pls.

31.—Simkins, C. S. Origin of the pigment in *Ecteinascidia*. Act. Zool. Stockholm **5** 1924 pp. 425–438 2 pls.

32.—Stewart, B. Experiments on *Ciona intestinalis*. Nature London **113** 1924 p. 14.

33.—Van Name, W. G. Bijdragen tot de kennis der fauna van Curaçao. Resultaten einer Reis van Dr. C. J. van der Horst in 1920. Ascidians from Curaçao. Bijdr. Dierk. Amsterdam **23** 1924 pp. 23–32 7 figs.

34.—Woodbridge, H. *Botryllus schlosseri* (Pallas): the behavior of the larva with special reference to the habitat. Biol. Bul. Wood's Hole Mass. **47** 1924 pp. 223–230.

Woodbridge, H. *vide* Grave, C.

35.—Zalenskij, V. V. La maturation et fécondation de l'eouf de *Salpa maxima-africana*. (In Russian.) Bul. Acad. Sci. Russ. Petrograd Ser. 6 **10** 1916 pp. 123–138 1 figs.

36.—Zalenskij, V. V. Sur la segmentation des oeufs de *Salpa fusiformis.* (In Russian.) Bul. Acad. Sci. Russ. Petrograd Ser. 6 **10** 1916 pp. 305–326 12 figs.

37.—Zalenskij, V. V. Sur les feuilles embryonaires des Salpes. (In Russian.) Bul. Acad. Sci. Russ. Petrograd Ser. 6 **10** 1916 pp. 503–522 8 figs.

38.—Zalenskij, V. V. Sur le développement de la cavité respiratoire de *Salpa fusiformis.* (In Russian.) Bul. Acad. Sci. Russ. Petrograd Ser. 6 **10** 1916 pp. 673–700 13 figs.

39.—Zalenskij, V. V. Les blastomènes et les calymmocytes de *Salpa fusiformis.* (In Russian.) Bul. Acad. Sci. Russ. Petrograd Ser. 6 **10** 1916 pp. 1295–1321 12 figs.

40.—Zalenskij, V. V. Zur l'organogenèse de *Salpa fusiformis.* (In Russian.) Bul. Acad. Sci. Russ. Petrograd Ser. 6 **10** 1916 pp. 1361–1378 12 figs.

41.—Zalenskij, V. V. Sur le sort des spermatozoïdes et sur la segmentation de l'oeuf de *Salpa maxima-africana.* (In Russian.) Bul. Acad. Sci. Russ. Petrograd Ser. 6 **10** 1916 pp. 1745–1766 16 figs.

42.—Zalenskij, V. V. Sur la structure de l'appareil sexuel feminin et sur la maturation de l'oeuf chez *Salpa bicaudata.* (In Russian.) Bul. Acad. Sci. Russ. Petrograd Ser. 6 **11** 1917 pp. 219–240 18 figs.

43.—Zalenskij, V. V. La segmentation de l'oeuf de *Salpa bicaudata.* I-ère période. (In Russian.) Bul. Acad. Sci. Russ. Petrograd Ser. 6 **11** 1917 pp. 623–644 14 figs.

44.—Zalenskij, V. V. La segmentation de l'oeuf de *Salpa bicaudata* (2-ème période). (In Russian.) Bul. Acad. Sci. Russ. Petrograd Ser. 6 **11** 1917 pp. 1113–1140 9 figs.

45.—Zalenskij, V. V. L'évolution de l'embryon de la *Salpa bicaudata.* (In Russian.) Bul. Acad. Sci. Russ. Petrograd Ser. 6 **15** 1921 pp. 485–508.

II.—SUBJECT INDEX.

GENERAL.

Metamerism of Enteropneusta; Horst, **18**: nomenclature; Hartmeyer, **14**: Huntsman, **19**: artificial production of Didemnid spicules; Prenant, **29**.

STRUCTURE.

Tunicata.—General; Arnbäck-Christie-Linde, **1, 2**: Hartmeyer, **15, 15a**: Michaelsen, **25**: Van Name, **33**: of Appendicularians; Bückmann, **3**: spicules; Prenant, **29**: pigment; Simkins, **31**: digestive tract; Essenberg, **5**: sense organs; Marco, **23**: reproductive organs; Simkins, **30**: Zalenskij, **42**: **Cephalochordata.** — Nervous system; Franz, **9**. **Enteropneusta.**—General; Evans, **6**: Horst **18**: nervous system; Hilton, **17**. **Pterobranchia.**—General; Ledig, **21**.

PHYSIOLOGY.

Cunningham, **4**; Fox, **8**; Franz, **9, 10**; Grave & Woodbridge, **11**; Hecht, **16**; MacBride, **22**; Morgan, **26, 27**; Stewart, **32**.

DEVELOPMENT.

Eggs and embryos; Simkins, **31**: Zalenskij, **35-45**: tadpole larva; Grave & Woodbridge, **11**: Woodbridge **34**: *Tornaria*; Peacock, **28**: pigment; Simkins, **31**: reproductive organs and germ cells; Simkins, **30**.

ETHOLOGY.

Habits of larva of *Botryllus*; Grave & Woodbridge, **11**: Woodbridge, **34**: distribution of Tunicata; Hartmeyer, **15, 15a**.

VARIATION AND EVOLUTION.

Evolution; Cunningham, **4**: Fox, **8**: MacBride, **22**: Stewart, **32**.

DISTRIBUTION.

Arctic and northern seas; Hartmeyer, **15, 15a**: Nova Zembla; Ärnbäck-Christie-Linde, **1**: Skager Rak and Cattegat; Michaelsen, **25**: North Sea; Meek, **24**: Michaelsen, **25**: Peacock, **28**: France; Harant, **12, 13**: West Indies; Horst, **18**: Van Name, **33**: Chili; Lahille, **20**; Antarctic Bückmann, **3**.

III.—SYSTEMATIC INDEX.

TUNICATA.

Nomenclature; HARTMEYER, **14**: genera of simple Ascidians of Savigny and Fleming; HUNTSMAN, **19**: Ascidians from Curaçao; VAN NAME Bijdr. Dierk **23** p. 23: from Chausey Isds., France; HARANT **13**: Ascidiacea of Arctic and Northern Seas; HARTMEYER Danish Ingolf-Exped. **2** pts. 6, 7: Appendicularians collected by "Deutschen Südpolarexpedition"; BÜCKMAN Zool. Anz. **59** p. 205: Botryllidae and Didemnidae of North Sea, etc.; MICHAELSEN Wiss. Meeresunt. Abt. Helgol. **14** p. 97.

Althoffia australis **sp. n.** Antarctic, BÜCKMANN t.c. p. 206 figs., 1–2.

Anomopera **gen. n.**, *ingolfiana* **sp. n.** N. Atlantic, HARTMEYER Danish Ingolf-Exped. **2** pt. 6 p. 130 pl. I figs. 2–4.

Aplidium caeruleum scissiacum **var. n.** France, HARANT Bul. soc. zool. France **49** p. 259.

Appendicularia sicula digestive tract, ESSENBERG **5**.

Botrylloides aurea, ÄRNBÄCK-CHRISTIE-LINDE **2**.

Botryllus schlosseri morphology, behaviour and reactions of larva, GRAVE & WOODBRIDGE **11**; habits of larva, WOODBRIDGE **34**; *B. planus*, VAN NAME t.c. p. 29 figs. 5, 6.

Ciona intestinalis experiments in self-fertilization, MORGAN **26**, **27**; reactions to light, HECHT **16**; effect of amputating siphons, CUNNINGHAM **4**, FOX **8**, MACBRIDE **22**, STEWART **32**.

Clavelina (?) *concrescens* **sp. n.** N. Atlantic, HARTMEYER Danish Ingolf-Exped. **2** pt. 7 p. 110.

Corella eumyota from Chili, LAHILLE **20**.

Didemnum helgolandicum **sp. n.** North Sea and Skager Rak, MICHAELSEN t.c. p. 118; *D. vanderhorsti* **sp. n.** Dutch W. Indies, VAN NAME t.c. p. 25 fig. 1.

Doliolum mirabilis, FEDELE **7**.

Ecteinascida turbinata origin of germ cells, SIMKINS **30**; of pigment, SIMKINS **31**.

Fritillaria helenae **sp. n.** St. Helena p. 210 figs. 11–13, *drygalskii* **sp. n.** Antarctic p. 211 figs. 14–16; *F. messanensis* p. 207 figs. 3–4, *scillae* p. 208 figs. 5–6, *fertilis* p. 209 figs. 7–8, *froudax* p. 209 figs. 9–10, described; BÜCKMANN t.c.

Heterostigma **gen. n.**; *separ* **sp. n.** Nova Zembla, ÄRMBÄCK-CHRISTIE-LINDE Ark. Zool. **16** (15) p. 1 figs. 1–6.

Hexacrobylus arcticus **sp. n.** North Sea, Faröe Isds., Hartmeyer Danish. Ingolf-Exped. **2** pt. 6 p. 133 pl. i figs. 5–6.

Lissoclinum wandeli **sp. n.** N. Atlantic, HARTMEYER Danish Ingolf-Exped. **2** pt. 7 p. 180 pl. i fig. 26.

Oikopleura graciloides **sp. n.** S. Atlantic, BÜCKMANN t.c. p. 205; *O. dioica*, MEEK **24**.

Perophora listeri, MEEK **24**.

Phallusia corelloides **sp. n.** Dutch W. Indies, VAN NAME t.c. p. 27 figs. 2–4.

Salpa bicaudata, fusiformis, maxima-africana, embryology, ZALENSKIJ **35**–**45**; *S. bicaudata* reproductive organs, ZALENSKIJ **42**.

CEPHALOCHORDATA.

Branchiostoma sense organs, reactions to light, FRANZ **9**; *B. lanceolatum*. sense organs, FRANZ **10**.

ENTEROPNEUSTA.

From Curaçao, HORST, Bijdr. Dierk. **23** pp. 33–58 pls.

Balanoglossus biminiensis, HORST t.c. p. 48 figs.

Dolichoglossus pusillus general anatomy, EVANS **6**; nervous system, HILTON **17**; *D. caraibiens* **sp. n.** Dutch W. Indies, HORST t.c. p. 33 figs.

Glossobalanus crozieri **sp. n.** Dutch W. Indies, HORST t.c. p. 42 figs.

Ptychodera bahamensis, HORST t.c. p. 50 figs.

Tornaria krohnii, PEACOCK **28**.

PTEROBRANCHIA.

Phoronis pacifica general anatomy, LEDIG **21**.

XIII. PISCES

BY

J. R NORMAN.

CONTENTS

	PAGE
I. Titles	2
II. Subject Index	21
General	21
Economics	21
Structure	22
Development	23
Physiology	23
Ethology	24
Variation and Evolution	24
Distribution	25
III. Systematic Index	26

I.—TITLES.

1.—Abolin, L. Mitteilungen aus der biologischen Versuchanstalt der Akademie der Wissenschaften in Wien (Zoologische Abteilung, Vorstand H. Przibraum). Nrs. 119, 120. Beeinflussung der Fischfarbwechsels durch Chemikalien. I. Infundin- und Adrenalinwirkung auf die Melano- und Xanthophoren der Elritze (*Phoxinus laevis* Ag.). II. Annahme mänlicher Erythrophorenfarbung durch das infundinsierte Weibchen der Elritze (*Phoxinus laevis* Ag.). Anz. Ak. Wiss. Wien **61** 1924 pp. 170–173.

2.—Abolin, L. Über den Einfluss der maximalen Darmatmung auf den histologischen Bau des Enddarms des Schlammpeizgers (*Misgurnus fossilis*). Eine experimentelle Studie über die respiratorische Tätigkeit des Enddarms. Biol. Zentralbl. Leipzig **44** 1924 pp. 433–458 12 figs.

3.—Ahl, E. Ueber eine farbenprächtige Neuheit, *Hemigrammus rhodostomus* E. Ahl sp. n. Wochen. Aquar. Terr. **1924** No. 18 1 p. 1 fig.

4.—Ahl, E. Die lebend eingeführten Zahnkarpfen Afrikas. Blatt, Aquar. Terrarienkunde **35** 1924 Heft 10 3 pp.

5.—Ahl, E. Über einige neue Fische aus Südamerika. Zool. Anz. Leipzig **58** 1924 pp. 358–361.

6.—Ahl, E. Über einen neuen Cichliden aus Ost-Africa. Zool. Anz. Leipzig **59** 1924 pp. 86–87.

7.—Ahl, E. Zur Systematik der altweltlichen Zahnkarpfen der Unterfamilie Fundulinae. Zool. Anz. Leipzig **60** 1924 pp. 49–55.

8.—Ahl, E. Über neue afrikanische Zahnkarpfen der Gattung *Panchax*. Zool. Anz. Leipzig **60** 1924 pp. 303–312.

9.—Ahl, E. Neue afrikanische Zahnkarpfen aus dem Zoologischen Museum Berlin. Zool. Anz. Leipzig **61** 1924 pp. 135–145.

10.—Allis, E. P. On the homologies of the skull of the Cyclostomata. J. Anat. London **58** 1924 pp. 256–264.

11.—Ancona, U. D'. Intorno al differenziamento del sesso nell'-anguilla. Atti Acc. Lincei Roma Ser. 5 **33** Sem. 1 1924 pp. 244–248.

12.—Ancona, U. D'. Dati per la biologia degli storioni nelle acque italiane. Monitore zool. ital. Siena **35** 1924 pp. 126–133.

13.—Ancona, U. D'. Lo sclerotomo nei Murenoidi. Amer. J. Anat. Philadelphia **33** 1924 pp. 1–10 2 pls.

Angel, F. *vide* Roule, L.

14.—Anutschin, A. W. Über eine Mutation des Brachsen (*Abramis brama* L.). Russ. Hydrobiol. Zeits. Saratov **3** 1924 pp. 71–72 2 figs.

15.—Archey, G. An abnormally coloured specimen of the Yellow-belly (*Rhombosolea millari* Waite). N. Zealand J. Sci. Tech. Wellington **6** 1924 p. 342.

16.—Artom, C. La specie di *Gambusia* acclimatata in Italia (*Gambusia holbrooki* Grd.) in relazione colla stabilità del carattere del gonopodio. Atti Acc. Lincei Roma Ser. 5 **33** Sem. 2 1924 pp. 278–282 1 fig.

17.—Artom, C. La sproporzione numerica dei sessi nella *Gambusia holbrooki* (Grd.) analizzata nelle cause molteplica. Atti Acc. Lincei Roma Ser. 5 **33** Sem. 2 1924 pp. 332–338.

18.—Athanassopoulos, G. Sur la répartition géographique des poissons d'eau douce en Grèce. C. R. Acad. sci. Paris **179** 1924 pp. 223–225.

19.—Athanassopoulos, G. Note complémentaire sur les "Thonnidés" en Grèce (Méditerranée orientale). Bul. Inst. Ocean. Monaco **440** 1924 3 pp.

20.—Athanassopoulos, G. Sur la disparition rapide des civelles. Bul. Inst. Ocean. Monaco **442** 1924 2 pp.

21.—Baccialon, A. Poissons terrestres et poissons grimpeurs. Riviera Scient. Nice **10** 1923 pp. 8–12.

22.—Bäckström, K. Contributions to the forebrain morphology in Selachians. Act. Zool. Stockholm **5** 1924 pp. 123–240 71 figs.

Baker, J. R. *vide* Murray, P. D. F.

Ball, S. C. *vide* Fowler, H. W.

23.—Bancroft, T. L. Some further observations on the Dawson River Barramundi: *Scleropages leichhardtii.* Proc. R. Soc. Queensland Brisbane **35** 1924 pp. 46–47.

24.—Becher, H. Über chromatische Organe und andere Chromatophorenzusammenlagerungen in der Haut einheimischer Fische (*Esox lucius, Coregonus fera, Leuciscus rutilus*). Zool. Jahrb. Jena Abt. Anat. **45** 1924 pp. 581–618 pls. 28–30.

25.—Beresowsky, A. I. Über die Klassifikation der *Coregonus* Arten. (In Russian). Russ. Hydrobiol. Zeits. Saratov **3** 1924 pp. 266–280. (Resumé in German.)

26.—Berg, L. S. Sur la distribution de l'anguille (*Anguilla anguilla* L.) dans les eaux de la Russie. (In Russian.) Ann. Mus. Zool. Acad. Sci. Petrograd **21** 1916 pp. 343–346.

27.—Berg, L. S. Sur la distribution du poisson (*Myoxocephalus quadricornis* (L.)), fam. Cottidae, et sur quelques problèmes y concernants. (In Russian). Bul. Acad. Sci. Russ. Petrograd Ser. 6 **10** 1916 pp. 1343–1360 5 figs.

28.—Berg, L. S. *Alburnoides bipunctatus rossicus*, subsp. nova. (In Russian.) Bul. Bur. Appl. Ichth. Petrograd **2** 1924 p. 56. (Resumé in English.)

29.—Berg, L. S. On the Kamchatka Grayling (*Thymallus arcticus pallasi* Val.). (In Russian.) Bul. Bur. Appl. Ichth. Petrograd **2** 1924 p. 86.

30.—Berg, L. S. Do *Osmerus eperlanus* and *Coregonus albula* occur in the basin of the Black Sea? (In Russian.) Bul. Bur. Appl. Ichth. Petrograd **2** 1924 p. 116.

31.—Berg, L. S. *Alburnus chalcoides aralensis.* (In Russian.) Bul. Bur. Appl. Ichth. Petrograd **2** 1924 pp. 170–174.

32.—Berlin, E. and **Kutscher,** F. Der Nachweis von Arginin, Betain, Cholin, und Acanthin in den Embryonen und der Leber des Dornhais (*Acanthias vulgaris*). Zs. Biol. München **81** 1924 pp. 87–92.

Bertin, L. *vide* Roule, L.

33.—Bertin, L. Revue de zoologie (Poissons). Rev. gén. sci. Paris **35** 1924 pp. 237–247 5 figs.

34.—Bertin, L. Revue de zoologie (Poissons). Deuxième partie: biologie des poissons. Rev. gén. sci. Paris **35** 1924 pp. 365–375.

Bigelow, N. K. *vide* Clemens, W. A.

35.—Bigelow, N. K. The food of young Suckers (*Catostomus commersonii*) in Lake Nipigon. Publications of the Ontario Fisheries Research Laboratory No. 21. Univ. Toronto Studies Biol. Ser. **24** 1924 pp. 83–115.

Bonde, C. von *vide* Gilchrist, J. D. F.

36.—Bonde, C. von. Shallow-water fishes procured by the S.S. "Pickle." Rep. Fish. Mar. Biol. Survey Union S. Africa Cape Town **3** 1924 Spec. Rep. No. I 40 pp. pls. i–ix.

37.—Bonde, C. von and **Swart,** D. B. The Platosomia (Skates and Rays) collected by the S.S. "Pickle." Rep. Fish. Mar. Biol. Survey Union S. Africa Cape Town **3** 1924 Spec. Rep. No. V 22 pp. pls. xx–xxiii.

38.—Borodin, N. Age of Shad estimated from examination of scales. Science New York N.Y. **60** 1924 p. 477.

39.—Bowie, D. J. Cytological studies of the islets of Langerhans in a teleost, *Neomaenis griseus.* Anat. Rec. Philadelphia **29** 1924 pp. 57–73 6 figs.

40.—Branson, E. B. The Devonian of Missouri. Missouri Bur. Geol. **17** 1923 pp. 126–129, 164–165 3 pls.

Breder, C. M. Jr. *vide* Nichols, J. T.

Breder, C. M. Jr. *vide* Welsh, W. W.

41.—Breder, C. M. Jr. Hermaphroditism of a Croaker, *Micropogon undulatus* (Linnaeus). Zoologica New York **2** 1922 pp. 281–284 fig. 97.

42.—Breder, C. M. Jr. The fishes of Sandy Hook Bay. Zoologica New York **2** 1922 pp. 333–351.

43.—Breder, C. M. Jr. Respiration as a factor in locomotion of fishes. Amer. Nat. New York **58** 1924 pp. 145–155.

44.—Breder, C. M. Jr. and **Crawford, D. R.** The food of certain minnows. A study of the seasonal dietary cycle of six cyprinoids with especial reference to fish culture. Zoologica New York **2** 1922 pp. 287–327 figs. 98–128.

45.—Britton, S. W. The effects of extreme temperatures on fishes. Amer. J. Physiol. Baltimore **67** 1924 pp. 411–421.

Brown, H. *vide* Jewell, M. E.

46.—Bruce, J. R. Changes in the chemical composition of the tissues of the Herring in relation to age and maturity. Biochem. J. Cambridge **18** 1924 pp. 469–485.

47.—Brunelli, G. *Amphisile* un esempio classico dei rapporti tra forma e funzione. Riv. Biol. Roma **5** 1923 pp. 457–462 4 figs.

48.—Bryant, W. L. A new species of *Bothriolepis* from the Upper Devonian of Canada. Bul. Buffalo Soc. Nat. Sci. **13** 1924 pp. 54–55 2 pls.

49.—Buchanan-Wollaston, H. J. The spawning of Plaice in the southern part of the North Sea in 1913–14. Ministry Agric. Fish. London Fishery Invest. Series II **5** 1923 No. 2 35 pp. charts.

50.—Buchanan-Wollaston, H. J. Growth-rings of Herring scales. Nature London **114** 1924 pp. 348–349 3 figs.

51.—Buen, F. de. *Gobius* de la Peninsula Ibérica y Baleares. Mem. Inst. Españ. Ocean. Madrid **3** 1923 pp. 123–266 70 figs.

52.—Buen, F. de. La biologie de la sardine en Galicie (Espagne). C.R. Acad. Sci. Paris **178** 1924 pp. 2125–2127.

53.—Buen, O. de. Les migrations du thon (*Orcynus thynnus*) sur les côtes altantiques du sud de l'Espagne. C. R. Acad. Sci. Paris **178** 1924 pp. 1104–1106.

54.—Burne, R. H. Some pecularities of the blood-vascular system of the Porbeagle Shark (*Lamna cornubica*). Phil. Trans. R. Soc. London Ser. B. **212** 1923 pp. 209–257 pls. ix, x 16 text-figs.

55.—Calderwood, W. L. The artificial and the natural breeding of the Salmon. Fish. Board Scotland Salmon Fish. **1924** No. II 18 pp.

56.—Chabanaud, P. Description de deux poissons de mer nouveaux d'Indo-Chine. Bul. Muséum Paris **1924** pp. 57–60.

57.—Chabanaud, P. Descriptions d'une espèce nouvelle et d'une forme supposée nouvelle de Poissons de mer de la côte d'Annam. Bul. Muséum Paris **1924** pp. 357–363.

58.—Chabanaud, P. Remarques sur *Dipterygonotus gruveli* Chab. et sur la famille des Dipterygonotidae Bul. Soc. zool. Paris **49** 1924 pp. 248–256.

59.—Champy, C. La structure remarquable du testicule des Blennies. C.R. Assoc. Anat. Paris **16** 1921 pp. 165–170 2 figs.

60.—Chapman, F. and **Cudmore, F. A.** New or little-known fossils in the national museum. Part XXVII.—Some Cainozoic fish remains, with a revision of the group. Proc. R. Soc. Vict. Melbourne **36** 1924 pp. 107–162 pls. ix–xi.

61.—Chevey, P. La connexion hepato-vitelline chez l'alevin de perche (*Perca fluviatilis*, L.). Bul. soc. zool. Paris **49** 1924 pp. 136–145. 7 figs.

62.—Chevey, P. Sur un cas d'acclimatation en eau libre du Black-Bass (*Micropterus salmoïdes* Lacépède) poisson importé d'origine Américaine. Bull. Soc. cent. aquicult. pêche Paris **31** 1924 pp. 97–100 1 fig.

63.—Chidester, F. E. A critical examination of the evidence for physical and chemical influences on fish migration. Brit. Journ. Exper. Biol. Edinburgh **2** 1924 pp. 79–118.

64.—Clemens, W. A., Dymond, J. R. and **Bigelow, N. K.** Food Studies of Lake Nipigon fishes. Publications of the Ontario Fisheries Research Laboratory No. 25. Univ. Toronto Studies Biol. Ser. **25** 1924 pp. 103–165.

65.—Cognetti de Martiis, L. Osservazioni sull' epidermide di *Amiurus catus* (L.). Natura Milano **14** 1923 124–126.

66.—Cognetti de Martiis, L. Cellule di senso diffuse alla parete dei canali laterali di un Teleosteo (*Amiurus catus* L.). Atti Acc. Sc. Torino **59** 1924 pp. 105–121 1 pl.

67.—Cognetti de Martiis, L. Osservazioni sul nervo ottico e sulla retina dei Siluridi. Atti Soc. ital sc. nat. Milano **63** 1924 pp. 203–207.

68.—Cotronei, G. Il fenomeno dell' accorciamento in rapporto alla maturità sessuale e alla senescenza dei Petromizonti. Atti Acad. Lincei Roma Ser. 5 **33** Sem. 1 1924 pp. 530–534.

69.—Cotronei, G. Sulla dimensioni raggiunte dal *Petromyzon fluviatilis* e sul fenomeno dell' accorciamento. Atti Acc. Lincei Roma Ser. 5 **33** Sem. 2 1924 pp. 282–285.

70.—Cowan, D. Herring investiga-. tions. II.—Size. Dove Marine Lab. Rep. **1924** pp. 31–40.

71.—Cowan, D. Vitality of young Plaice. Dove Marine Lab. Rep. **1924** p. 41 fig. II.

72.—Cox, P. New and rare records of certain freshwater fishes in Canada. Canad. Field Nat. Ottawa **38** 1924 pp. 85–86.

Crawford, D. R. *vide* Breder, C. M. Jr.

Creaser, C. W. *vide* Hubbs, C. L.

73.—Crozier, W. J. and **Hubbs,** C. L. Temperature effects in the hearts of a twinned embryo. Amer. J. Physiol. Baltimore **69** 1924 pp. 43–45.

Cudmore, F. A. *vide* Chapman, F.

74.—Cunningham, J. T. The natural history of the Common Eel. Nature London **113** 1924 pp. 199–201.

Danois, E. le *vide* Joubin, L.

Dauphinee, J. A. *vide* Hunter, A.

75.—De Beer, G. R. The prootic somites of *Heterodontus* and of *Amia*. Q. J. Microsc. Sci. London **68** 1924 pp. 17–38 16 figs.

76.—De Beer, G. R. Contributions to the study of the development of the head in *Heterodontus*. Q. J. Microsc. Sci. London **68** 1924 pp. 39–65 21 figs.

77.—De Beer, G. R. Studies on the vertebrate head. Part I. Fish. Q. J. Microsc. Sci. London **68** 1924 pp. 287–341 42 figs.

78.—De Beer, G. R. Note on placodes and the ophthalmic nerves. Q. J. Microsc. Sci. London **68** 1924 pp. 661–665 6 figs.

79.—De Beer, G. R. Note on a hermaphrodite Trout. Anat. Rec. Philadelphia **27** 1924 pp. 61–62 1 fig.

80.—De Beer, G. R. On a problematical organ in the Lamprey. J. Anat London **59** 1924 pp. 97–107 14 figs.

81.—Degener, L. M. The development of the dentary bone and teeth of *Amia calva*. J. Morph. Philadelphia **39** 1924 pp. 113–139 8 pls. 1 text-fig.

82.—Delsman, H. C. Fish eggs and larvae from the Java-Sea. 3. A pelagic Scombresocid egg. Treubia Batavia **5** 1924 pp. 408–418 12 figs.

83.—Derjavine, A. N. Nutrition de la brême (*Abramis brama* L.). (In Russian.) Trav. Lab. Ichth. Astrachan **4** fasc. 3 1918 29 pp. (Resumé in French.)

84.—Derjavine, A. N. Nutrition des Harengs (*Caspialosa caspia* Eichw., *C. caspia volgensis* Meissn., *C Kessleri* Gr., *C. brashnikovi* Bor., *C. saposhnikovi* Gr.). (In Russian.) Trav. Lab. Ichth. Astrachan **4** fasc. 3 1918 32 pp. (Resumé in French.)

85.—Derscheid, J. M. Structure de l'organe olfactif chez les poissons. Première partie. Osteichthyes, Teleostei, Malacopterygii. Ann. Soc. roy. zool. Bruxelles **54** 1924 pp. 79–162 26 figs.

86.—Derscheid, J. M. Note sur certains Clupeidae de la côte W. de l'Afrique. Rev. Zool. Africaine Bruxelles **12** 1924 fasc. 2 pp. 278–282.

87.—Devincenzi, G. J. Peces del Uruguay. II. Nuestra fauna ictiológica según nuestras colecciones (continuación). An. Mus. Montevideo Ser. 2 **5** 1924 pp. 139–290 pls. xiii–xxiii.

Disler, N. N. *vide* Sewertzoff, A. N.

88.—Domratscheff, P. S. Ueber die Verbreitung der kleinen Maräne und des Stints im Zusammenhang mit den Fischereiperspectiven im Seerayon. (In Russian.) Russ. Hydrobiol. Zeits. Saratov **2** 1923 pp. 115–123.

89.—Drensky, P. Ochrida-See und seine Fischfauna. Trav. Soc. Bulg. Sci. Nat. Sofia **9** 1921 pp. 103–112.

90.—Drensky, P. Squalidae dans la mer Noire. Une nouvelle espèce anguillat (*Squalus blainvili* Riss.) pour la mer Noire. Trav. Soc. Bulg. Sci. Nat. Sofia **10** 1923 pp. 55–59 2 figs.

91.—Drensky. P. Bestimmungstabellen der Fischeivon Schwarzen Meer. Trav. Soc. Bulg. Sci. Nat. Sofia **11** 1924 pp. 50–63.

92.—Drensky, P. Über eine neue Fisch-Art aus dem Donau bei Swistov (Bulgarian) — *Benthophilus macrocephalus* Pallas. Trav. Soc. Bulg. Sci. Nat. Sofia **11** 1924 pp. 64–67.

93.—Dubois, R. Sur la pseudoluminescence et le rôle du tapis chez certains poissons. C.R. Acad. sci. Paris **178** 1924 pp. 1030–1032.

94.—Dücker, M. Uber die Augen der Zyklostomen. Jenaische Zs. Natw. **60** 1924 pp. 471–530 pls. 26–29.

95.—Duncker, G. Die Korrelation zwischen Länge und Gewicht bei Fischen. Wiss. Meeresunters. Kiel N. F. **15** 1923 Abt. Helgoland No. 4 50 pp. 1 pl.

96.—Dutta, S. K. On a peculiar disposition of the liver and the kidney in the fish genera *Clarias* and *Saccobranchus.* J. Asiat. Soc. Beng. Calcutta **19** 1924 pp. 111–120 12 figs.

97.—Duval, M. Constance remarquable du milieu interieur des Téléostéens Marins. C.R. Acad. sci. Paris **178** 1924 pp. 128–130.

Dymond, J. R. *vide* Clemens, W. A.

98.—Ehrenbaum, E. Ueber die Makrele. Laichverhältnisse.—Larven und Jugendformen. Nahrung und Feinde. Wiss. Meeresunters. Kiel **15** 1923 Abt. Helgoland No. 2 32 pp. 1 pl.

99.—Ehrenbaum, E. Scombriformes. Report Danish Ocean. Exped. 1908–1910 **2** (Biology) A. 11 1924 42 pp. 10 figs.

100.—Eichelbaum, E. Das Auftreten der Aalbrut an der deutschen Küste und ihre erste Nahrungsaufnahme. Nebst eine Nachschrift von H. Henking. Wiss. Meeresunters. Kiel **15** 1924 Abt. Helgoland No. 15 28 pp.

101.—Eigenmann, C. H. Yellow fever and fishes in Colombia. Proc. Amer. Phil. Soc. Philadelphia **63** 1924 pp. 236–238 pl. I.

102.—Erasmo, G. d'. Ittioliti miocenici di Rosignano-Piemonte e di Vignale (Museo geologico della R. Università de Torino). Mem. Carta Geol. Ital. Roma **9** Pt. II 1924 37 pp. 4 pls.

103.—Erasmo, G. d'. Brevi osservazioni sul "*Coelodus materanus* Silv." del calcare cretacico delle Murge. Riv. ital. paleont. Parma **30** 1924 pp. 13–16.

104.—Erasmo, G. d'. Il *Petalopteryx elegans* (Bassani) dei calcari cretacici dell' Istria e della Dalmazia. Boll. Soc. geol. ital. Roma **42** 1924 pp. 109–120 pl. ii.

105.—Evans, H. M. The poison gland of *Trygon.*—Supplementary note. Proc. R. Soc. London Ser. B **96** 1924 pp. 491–493 2 figs.

Evermann, B. W. *vide* Jordan, D.S.

106.—Evermann, B. W. and **Seale,** A. Report on the fishes collected by the Barbados-Antigua Expedition from the University of Iowa in 1918. Univ. Iowa Studies Nat. Hist. **10** 1923 pp. 25–40 1 fig.

107. Farran, G. P. Seventh report on the fishes of the Irish Atlantic Slope. The Macrurid fishes (Coryphaenoididae). Proc. R. Irish Acad. Dublin **36** 1924 Sect. B. pp. 91–148 pls. vi–vii 11 text-figs.

Feenstra, T. P. *vide* Zwaardemaker, H.

108.—Ficalbi, E. Struttura del tegmento dei Petromizonti. IV.—Le cellule epidermiche speciali. Arch. Ital. Anat. Embr. Firenze **21** 1924 pp. 1–54 pls. i–ii.

109.—Fiebiger, J. Über Besonderheiten der Sinnesorgane bei Fischen, insbesondere über den Weberschen Apparat. Verh. Zool. Bot. Ges. Wien **73** 1924 pp. (141–147).

110.—Fowler, H. W. Zoological results of a tour in the Far East. Fish of the Tai-Hu, Kiangsu Province, China. Mem. Asiat. Soc. Bengal Calcutta **6** 1924 pp. 505–519.

111.—Fowler, H. W. Notes and descriptions of Indian fishes. J. Bombay Nat. Hist. Soc. **30** 1924 pp. 36–41.

112.—Fowler, H. W. Notes and descriptions of Indian fresh-water Fishes. Proc. Acad. Nat. Sci. Philadelphia **76** 1924 pp. 67–101 9 figs.

113.—Fowler, H. W. Notes on North American Cyprinoids. Proc. Acad. Nat. Sci. Philadelphia **76** 1924 pp. 389–416 23 figs.

114.—Fowler, H. W. Some fishes collected by the third Asiatic Expedition in China. Bul. Amer. Mus. Nat. Hist. New York **50** 1924 pp. 373–405 5 figs.

115.—Fowler, H. W. and **Ball,** S. E. Descriptions of new fishes obtained by the Tanager Expedition of 1923 in the Pacific Islands west of Hawaii. Proc. Acad. Nat. Sci. Philadelphia **76** 1924 pp. 269–274.

116.—Fowler, H W. and **Silvester,** C. F. A collection of fishes from Samoa. Papers Dept. Marine Biol. Carnegie Inst. Washington **18** 1922 pp. 111–126 2 figs.

117.—Franceschi, D. Pesci fossili nuovi o poco noti del Terziario Italiano. Paleontogr. Italica Pisa **28** 1922 pp. 69–84 pl. xiv (i).

118.—Frédérix, G. La faune paléozoïque supérieure des environs de la ville de Krasnooufimsk. (In Russian.) Mem. Com. Géol. Petrograd **109** 1915 117 pp. 10 pls. [Resumé in French.]

119.—Freidenfelt, T. Undersökninger över gösens tillväxt särskilt i Hjalmaren. (Untersuchungen über den Zuwachs des Zanders, mit besonderer Berücksichtigung des Hjälmaren-Sees). Medd. Kungl. Lantbruk. Stockholm **235** No. 1 1922 75 pp. 2 pls. (Resumé in German.)

120.—Frenguelli, G. Sulla contemporanea presenza del *Carcharodon megalodon* Ag. e del *Carcharodon rondeleti* M. et H. nel Paranense Superiore di Entre Rios (Rep. Argentina). Boll. Soc. geol. ital. Pisa **41** 1923 pp. 50–52.

121.—Frentzen, K. *Ceratodus palaeoruncinatus* sp. n. aus dem oberen Buntsandstein der Gegend von Durlach in Baden. Centralbl. Min. Stuttgart **1924** pp. 216–220 1 fig.

122.—Frisch, K. v. Versuche und Bemerkungen zu Schnurmann's Hypothese von der Farbenanpassung "total farbenblinder" Fische. Zs. Biol. München **80** 1924 pp. 223–230.

123.—Frost, G. A. Otoliths of fishes from the Upper Kimmeridgian of Buckinghamshire and Wiltshire. Ann. Mag. Nat. Hist. London Ser. 9 **14** 1924 pp. 139–143 pl. v.

124.—Frost, G. A. Otoliths of fishes from the Tertiary formations of New Zealand. Trans. N. Zealand Inst. Wellington **55** 1924 pp. 605–614 pls. 61–62.

125.—Fudakowski, J. Bau des "Gaumenorgans" der Knochenfische. Bul. Intern. Acad. Kraków **1922 B** pp. 101–103.

126.—Galtsoff, P. S. Seasonal migrations of Mackerel in the Black Sea. Ecology Brooklyn N. Y. **5** 1924 pp. 1–5 1 fig.

Gauster, F. *vide* Scheminzky, F.

127.—Geiser, S. W. Sex-ratios and spermatogenesis in the Top-minnow, *Gambusia holbrooki* Grd. Biol. Bul. Wood's Hole Mass. **47** 1924 pp. 175–207 3 pls. 2 text-figs.

128.—Gelderen, C. van. Die Morphologie der Sinus durae matris. Erster Teil. Die vergleichende Ontogenie der neurokraniellen Venen der Anamnier und Reptilien. Zs. Anat. Entwick. München **73** 1924 pp. 541–605 38 figs.

129.—Gemmellaro, M. Otoliti del "Piano Siciliano" dei dintorni di Palermo. Giorn sc. nat. econ. Palermo **32** 1921 pp. 155–161.

130.—Gianferrari, L. Pesci raccolti in Eritrea dalla spedizione Corni-Calciati-Bracciani. Atti Soc. ital sc. nat. Milano **63** 1924 pp. 239–244 1 fig.

131.—Gilbert, C. H. The aquatic resources of the Hawaiian Islands. II. The deep-sea fishes. Bul. U.S. Fish. Comm. Washington **23** 1905 pp. 577–713 pls. 66–101 text-figs. 230–276. [Omitted from "Record" for 1905.]

132.—Gilbert, C. H. Experiment in tagging adult Red Salmon, Alaska Peninsula Fisheries Reservation, summer of 1922. Bul. Bur. Fish. Washington **39** 1924 pp. 39–50 1 fig.

133.—Gilchrist, J. D. F. and **Bonde,** C. von. The Stromateidae (Butter Fishes) collected by the S.S. "Pickle." Rep. Fish. Mar. Biol. Survey Union S. Africa, Cape Town **3** 1924 Spec. Rep. No. IV 12 pp. pls. xvii–xix.

134.—Gilchrist, J. D. F. and **Bonde,** C. von. Deep-sea fishes procured by the S.S. "Pickle" (Part II). Rep. Fish Mar. Biol. Survey Union S. Africa, Cape Town **3** 1924 Spec. Rep. No. VII 24 pp. 6 pls.

135.—Grabau, A. W. Cretaceous fossils from Shantung. Bul. Geol. Surv. China Peking **5** 1923 pp. 143–181 2 pls. 7 text-figs.

136.—Granel, F. La pseudobranchie de *Chrysophrys aurata.* C. R. Assoc. Anat. Paris **18** 1923 pp. 233–236.

137.—Granel, F. Sur la branchie de l'évent (pseudobranchie) des Sélaciens. C.R. Acad. sci. Paris **178** 1924 pp. 2003–2005.

Greeley, P. O. *vide* Ulrey, A. B.

138.—Greene, C. W. Gases of the swim-bladder of the California phosphorescent fish, *Porichthys notatus.* Amer. J. Physiol. Baltimore **68** 1924 pp. 117–118.

139.—Greene, C. W. Physiological reactions and structure of the vocal apparatus of the California Singing Fish, *Porichthys notatus.* Amer. J. Physiol. Baltimore **70** 1924 pp. 496–499 4 figs.

140.—Greene, C. W. Analysis of the gases of the air-bladder of the California Singing Fish, *Porichthys notatus.* J. Biol. Chem. Baltimore **59** 1924 pp. 615–621.

141.—Greene, C. W. and H. H. Phosphorescence of *Porichthys notatus,* the California Singing Fish. Amer. J. Physiol. Baltimore **70** 1924 pp. 500–506 1 fig.

Greene, H. H. *vide* Greene, C. W.

142.—Gregory, W. K. A fossil ganoid fish (*Lepidotus* (?) *lacotanus,* new species) from the Lower Cretaceous of South Dakota. Amer. Mus. Novit. New York **134** 1924 8 pp. 2 figs.

143.—Guastella, O. Osservazioni comparative sulla regione anteriore del cranio dei Selaci. Bul. Inst. Zool. Univ. Palermo **1** 1921 pp. 97–104 1 pl.

144.—Gudger, E. W. The sources of the material for Hamilton-Buchanan's Fishes of the Ganges, the fate of his collections, drawings and notes, and the use made of his data. J. Asiat. Soc. Beng. Calcutta **19** 1924 pp. 121–136.

145.—Hague, F. S. The chondrocranium of *Amia calva.* J. Morph. Philadelphia **39** 1924 pp. 267–277 3 pls.

146.—Hall, F. G. The functions of the swimbladder of fishes. Biol. Bul. Wood's Hole, Mass. **47** 1924 pp. 79–117 5 pls. 7 text-figs.

147.—Hance, R. T. Heredity in Goldfish. A note on the inheritance of dovetails and telescope-eyes in Goldfish. J. Heredity Washington **15** 1924 pp. 117–182 figs. 25–29.

148.—Hankinson, T. L. The habitat of the Brook Trout in Michigan. Papers Michigan Acad. Sci. New York **2** 1923 pp. 197–205.

149.—Hankinson, T. L. A preliminary report on a fish survey in Western New York. Bul. Buffalo Soc. Nat. Sci. **13** 1924 pp. 57–87.

150.—Hara, S. Über die Wirkung verschiedener Narkotica auf die Atmung des Goldbutt (*Pleuronectes platessa*). Zs. ges. exper. Medizin Berlin **43** 1924 pp. 256–269.

151.—Harkness, W. J. K. The rate of growth and the food of the Lake Sturgeon (*Acipenser rubicundus* Le Sueur). Publications of the Ontario Fisheries Research Laboratory No. 18. Univ. Toronto Studies Biol. Ser. **24** 1924 pp. 15–42 6 figs.

152.—Harvey, E. N. The production of light by the fishes *Photoblepharon* and *Anomalops.* Papers Dept. Marine Biol. Carnegie Inst. Washington **18** 1922 pp. 45–60.

153.—Haughton, S. H. The fauna and stratigraphy of the Stormberg Series. Ann. S. Afric. Mus. Cape Town **12** 1924 pp. 323–495 55 figs.

Henking, H. *vide* Eichelbaum, E.

154.—Herre, A. W. C. T. Some rare Philippine Eels. Philippine J. Sci. Manila P. I. **24** 1924 pp. 107–111.

155.—Herre, A. W. C. T. Distribution of the true fresh-water fishes in the Philippines—I. the Philippine Cyprinidae. Philippine J. Sci. Manila P. I. **24** 1924 pp. 249–306 2 pls.

156.—Herre, A. W. C. T. Distribution of the true fresh-water fishes in the Philippines—II. the Philippine Labyrinthici, Clariidae and Siluridae. Philippine J. Sci. Manila P. I. **24** 1924 pp.683–707 2 pls.

157.—Herre, A. W. C. T. Poisonous and worthless fishes. An account of the Philippine Plectognaths. Philippine J. Sci. Manila P. I. **25** 1924 pp. 415–510 2 pls.

158.—Hertling, H. Ueber den grauen und den roten Knurrhahn (*Trigla gurnardus* L. und *Trigla hirundo* Bloch). Ein Beitrag zur Kenntnis ihrer Lebensweise und ihres Vorkommens insbesondere in der Nordsee. Wiss. Meeresunters Kiel **15** 1924 Abt. Helgoland No. 13 53 pp.

Hildebrand, S. F. *vide* Meek, S. E.

159.—Hildebrand, S. F. Annotated list of fishes collected in vicinity of Augusta, Ga., with description of a new Darter. Bul. Bur. Fish. Washington **39** 1924 pp. 1–8 1 fig.

160.—Hollstein, W. *Rhinobatus tesselatus* v. d. Marck aus dem Obersenon Westfalens. Centralbl. Min. Stuttgart **1924.** pp. 114–116.

161.—Holzmayer, H. Zur Altersbestimmung der Acipenseriden. Zool. Anz. Leipzig **59** 1924 pp. 16–18 1 fig.

162.—Hora, S. L. Fish of the Siju Cave, Garo Hills, Assam. Rec. Ind. Mus. Calcutta **26** 1924 pp. 27–31 1 fig.

163.—Hora, S. L. Notes on fishes in the Indian Museum—VI. On a new genus of Gobioid fishes (sub-family Trypaucheninae) with notes on related forms. Rec. Ind. Mus. Calcutta **26** 1924 pp. 155–163 4 figs.

164.—Hora, S. L. Notes on fishes in the Indian Museum.—VII. On a new genus of "Globe-fishes" (Fam. Tetraodontidae). Rec. Ind. Mus. Calcutta **26** 1924 pp. 579–582 pl. xxxiv. 1 text-fig.

165.—Hora, S. L. Zoological results of a tour in the Far East. Fish of the Talé Sap, Peninsular Siam. Parts I, II. Mem. Asiat. Soc. Bengal Calcutta **6** 1924 pp. 463–476 3 figs. 479–501 7 figs.

166.—Hora, S. L. On certain local names of the fishes of the genus *Garra.* J. Asiat, Soc. Beng. Calcutta **19** 1924 pp. 105–109.

167.—Hornell, J. and **Nayudu,** M. R. A contribution to the life-history of the Indian Sardine with notes on the plankton of the Malabar Coast. Madras Fish. Bull. **17** 1924 pp. 129–187 10 pls.

168.—Hornyold, A. G. Mensurations de civelles (angulas) du Llobregat. Treb. Mus. Cièn. Nat. Barcelona **7** 1923 No. 2 24 pp. 2 pls.

169.—Hornyold, A. G. L'âge et la croissance de quelques Anguilles pêchées dans l'Ebro à Gallur. Rev. Hydrol. Aarau **2** 1924 pp. 209–216.

170.—Hornyold, A. G. Observaciones sobre la edad y el crecimiento de la anguila del Guadalquivir, en Sevilla. Bol. Soc. Esp. Hist. Nat. Madrid **24** 1924 pp. 357–362 5 figs.

171.—Hornyold, A. G. Observaciones sobre la edad y crecimiento de la anguila del Mar Menor. Rev. Ibérica Tortosa **541** 1924 7 pp. 1 pl. 7 text-figs.

172.—Hoyer, H. and **Michalski,** W. Das Lymphgefässsystem bei Forellenembryonen (*Salmo fario* L.). Bul. Intern. Acad. Kraków **1915B** pp. 212–216.

Hubbs, C. L. *vide* Crozier, W. J.

173.—Hubbs, C. L. Seasonal variation in the number of vertebrae of fishes. Papers Michigan Acad. Sci. New York **2** 1923 pp. 217–214.

174.—Hubbs, C. L. Studies of the fishes of the order Cyprinodontes. Occ. Papers Mus. Zool. Ann. Arbor Mich. **148** 1924 8 pp.

175.—Hubbs, C. L. and **Creaser,** C. W. On the growth of young suckers and the propagation of Trout. Ecology Brooklyn N. Y. **5** 1924 pp. 372–378.

176.—Hunter, A. and **Dauphinee,** J. A. Quantitative studies concerning the distribution of arginase in fishes and other animals. Proc. R. Soc. London Ser. B **97** 1924 pp. 227–242.

177.—Hunter, A. and **Dauphinee,** J. A. The occurrence and concentration of arginase in the organs of fishes and other animals. J. Physiol. Cambridge **59** 1924 pp. xxx-xxxi.

178.—Hutton, J. A. Wye Salmon. Results of Scale reading, 1923. Salmon and Trout Mag. London **1924** (April) 34 pp.

179.—Hutton, J. A. The Salmon of the Derwent 1923. Salmon and Trout Mag. London **1924** (July) 6 pp.

180.—Hutton, J. A. Salmon Scales from the Aberdeenshire Dee, 1923. Salmon and Trout Mag. London **1924** (July) 11 pp.

181.—Hutton, J. A. The life-history of the Salmon. Pub. Aberdeen Nat. Hist. Antiq. Soc. No. 5. Aberdeen Univ. Press 1924 56 pp. 17 pls.

182.—Ihering, H. v. Die Kreide-Eocän-Ablagerung der Antarktis. Neues Jahrb. Min. Stuttgart **51** 1924 pp. 240–301.

183.—Ishiwara, F. Studien über das Fugutoxin. Arch. exper. path. Leipzig **103** 1924 pp. 209–218.

184.—Isnard, P. A propos des "*Xiphias gladius*" Linné, capturés à Nice pendant l'Automne 1921. Riviera Scient. Nice **10** 1923 pp. 46–47.

Janet, H. *vide* Mawas, J.

185.—Jewell, M. E. and **Brown,** H. The fishes of an acid lake. Trans. Amer. Microsc. Soc. Menasha Wis. **43** 1924 pp. 77–84.

186.—Johansen, A. C. On the summer and autumn-spawning Herrings of the North Sea. Medd. Havunders. Kjöbenhavn Ser. Fisk. **7** No. 5 1924 118 pp. 15 figs.

187.—Johansen, A. C. Ueber die Winterheringe des Kattegats. Wiss. Meeresunters. Kiel **15** 1923–4 Abt. Helgoland No. 12 58 pp. 2 pls.

188.—Johnstone, J. Malignant tumours in fishes. J. Mar. Biol. Ass. Plymouth **13** 1924 pp. 447–467 2 pls.

189.—Jordan, D. S. Description of a recently discovered Sculpin from Nevada regarded as *Cottus beldingi*. Proc. U. S. Nat. Mus. Washington **65** Art. 6 1924 2 pp. 1 pl.

190.—Jordan, D. S. A Top-Minnow (*Cyprinodon browni*) from an artesian well in California. Proc. Acad. Nat. Sci. Philadelphia **76** 1924 pp. 23–24.

191.—Jordan, D. S. Concerning the genus *Hybopsis* of Agassiz. Copeia New York **1924** No. 130 pp. 51–52.

192.—Jordan, D. S. Concerning the American Dace allied to the genus *Leuciscus*. Copeia New York **1924** No. 132 pp. 70–72.

193.—Jordan, D. S. Rare species of fishes from the coast of Southern California. Copeia New York **1924** No. 134 pp. 81–82.

194.—Jordan, D. S. Concerning the genus *Exocoetus* Linnaeus. Copeia New York **1924** No. 135 pp. 89–91.

195.—Jordan, D. S. Miocene fishes from Southern California. Bul. S. Cal. Acad. Sci. Los Angeles **23** 1924 pp. 42–50 pls. F–L.

196.—Jordan, D. S. and **Evermann,** B. W. The aquatic resources of the Hawaiian Islands. Part I.—The shore fishes of the Hawaiian Islands, with a general account of the fish fauna. Bul. U.S. Fish. Com. Washington **23** Pt. I 1905 pp. 1–574 pls. i–lxxiii. [Omitted from "Record" for 1905.]

197.—Jordan, D. S. and **McGregor,** E. A. Description of a new species of Trout (*Salmo rosei*) from Lake Culver in the High Sierras of California. Proc. Acad. Nat. Sci. Philadelphia **76** 1924 pp. 19–22 pl. ii.

198.—Jordan, D. S. and **Seale,** A. The fishes of Samoa. Description of the species found in the Archipelago, with a provisional check-list of the fishes of Oceania. Bul. Bur. Fish. Washington **25** 1906 pp. 173–455 pls. xxxiii–liii. [Omitted from "Record" for 1906.]

199.—Jordan, H. E. and **Speidel,** C. C. Studies on lymphocytes. II.—The origin, function, and fate of the lymphocytes in fishes. J. Morph. Philadelphia **38** 1924 pp. 529–548 1 pl.

200.—Joubin, L. and **Danois,** E. le. Catalogue illustré des animaux marins comestibles des côtes de France et des mers limitrophes avec leurs noms communs français et étrangers. Première partie. Poissons osseux. Mem. Office Sci. Tech. pêches marit. Paris Spec. Ser. **1** 1924 220 pp. figs.

Jugeat, — *vide* Pellegrin, J.

201.—Karpinskij, A. Sur une nouvelle espèce d' *Helicoprion* (*Helicoprion Clerki*, n. sp.). (In Russian.) Bul. Acad. Sci. Russ. Petrograd Ser. 6 **10** 1916 pp. 701–708 5 figs.

202.—Karpinskij, A. *Helicoprion Ivanovi* n. sp. (In Russian.) Bul. Acad. Sci. Russ. Petrograd Ser. 6 **16** 1922 pp. 369–378 4 figs.

203.—Karpinskij, A. Notice sur les segments dentaires des Edestides et leurs orientation. (In Russian.) Bul. Acad. Sci. Russ. Petrograd Ser. 6 **16** 1922 pp. 379–388 11 figs.

204.—Kasansky, V. I. Sur le developpement et la systematique de larves des Carpiens. (In Russian.) Trav. Lab. Ichth. Astrachan **3** fasc. 7 1915 23 pp. 5 pls. 3 text-figs.

205.—Kasansky, B. J. On the ciliary movement of the embryon *Esox lucius* L. under hull of the egg. (In Russian.) Rep. Lab. Ichth. Astrachan **5** No. 2 1922 pp. 113–126.

206.—Keibel, F. Über die Gefässe von Petromyzonten. Sitzber. Ak. Wiss. Berlin **1924** pp. 272–273 2 figs.

207.—Kendall, W. K. The status of fish culture in our inland public waters, and the role of investigation in the maintenance of fish resources. Roosevelt Wild Life Bull. **2** 1924 pp. 205–351 figs. 20–45.

208.—Khan, M. H. Observations on the breeding habits of some freshwater fishes in the Punjab. J. Bombay Nat. Hist. Soc. **29** 1924 pp. 958–962 figs.

209.—Kien-Tsing, B. Zur mikrotechnischen Bearbeitung von Knochenfischeiern. Zs. wiss. Mikrosk. Leipzig **39** 1922 pp. 165–168 1 pl.

210.—Kindred, J. E. An intermediate stage in the development of the skull of *Syngnathus fuscus*. Amer. J. Anat. Philadelphia **33** 1924 pp. 421–440 3 pls.

211.—Kisselevitch, K. A. Materials on the biology of the Caspian Herrings. 1. The fertility of the Wolga-Caspian Herrings. (In Russian.) Rep. Ichth. Lab. Astrachan **5** No. 1 1923 pp. 15–55 6 pls. (Resumé in English.)

212.—Kisselevitz, K. The Clupeids of the Caspi-Volga District. Part I. Systematic. (In Russian.) Board Fish. Moscow. (Results Astrakhan Sci. Exped. 1914–15) 1923 155 pp. 5 pls. (Resumé in English.)

213.—Koelz, W. Two new species of Cisco from the Great Lakes. Occ. Papers Mus. Zool. Ann Arbor Mich. **146** 1924 8 pp.

Koppànyi, T. *vide* Pearcy, J. F.

214.—Koshantschikov, L. Zur biologie des *Thymallus arcticus* Pall. (Pisces Salmonidae) im Hochgebirgsee Bujba. (In Russian.) Jahrb. Martj. Staatmus. Minussinsk **1** 1923 pp. 51–59.

215.—Kowatschew, W. Die Fische des Struma Flusses. Trav. Soc. Bulg. Sci. Nat. Sofia **9** 1921 pp. 87–89.

216.—Kowatschew, W. Ein Versuch zur Untersuchung der Fischfauna des Mariza-Flusses. Trav. Soc. Bulg. Sci. Nat. Sofia **9** 1921 pp. 90–94.

217.—Kraatz, W. C. A study of the food of the Minnow *Campostoma anomalum*. Ohio J. Sci. Columbus **23** 1923 pp. 265–283.

218.—Kramp, P. L. Fish eggs and larvae collected in the Belt Sea in March, 1922. Medd. Havunders. Kjöbenhavn Ser. Fisk. **7** No. 6 1924 19 pp. 4 figs.

219.—Kroneker, K. Experimentelles aus der Fischkunde. Verh. Zool. Bot. Ges. Wien **73** 1924 pp. 112–118.

220.—Kruizinga, P. *Apateodus Corneti* (For.) in the Senonian beds of the southern part of Limburg (Netherlands). Proc. Sci. Akad. Wet. Amsterdam **27** 1924 pp. 293–312 1 pl.

221.—Kryshanowskij, S. S. Über die Sterblichkeit einiger Knochenfischlarven verursacht durch defektive Herztatigkeit. Russ. Hydrobiol. Zeits. Saratov **3** 1924 pp. 141–142.

222.—Kryshtafovich, A. N. A tooth of a fossil shark from Tambaron Island, near Southern Mindoro. Philippine J. Sci. Manila P. I. **25** 1924 pp. 155–156 1 pl.

223.—Kudo, K. Beiträge zur Anatomie des Zwischen- und Mittelhirns der Knochenfische. III. Eine frontale Verbindung des Torus longitudinalis. Anat. Anz. Jena **57** 1924 pp. 271–275 3 figs.

224.—Kulmatycki, W. *Phoxinus Czekanowskii Czekanowskii* Dyb. pod Poznaniem. Spraw. Kom. fizyogr. Kraków for **1918-20** 1920 pp. 182–188.

225.—Kurz, —. Untersuchungen zur Anatomie des Kopfes des Jangtsestöres. Zs. Anat. Entwick. München **75** 1924 pp. 36–68 9 figs.

Kutscher, F. *vide* Berlin, E.

226.—Kyle, H. M. The factors determining the number of vertebrae in fishes. Wiss. Meeresunters. Kiel N.F. **15** 1923 Abt. Helgoland No. 9 8 pp.

227.—Leach, G. C. Artificial propagation of Whitefish, Grayling, and Lake Trout. Rep. U. S. Fish. Com. Washington for **1923** 1924 App. III 32 pp. 42 figs.

228.—Leach, G. C. Artificial propagation of Brook Trout and Rainbow Trout, with notes on three other species. Rep. U. S. Fish. Com. Washington for **1923** 1924 App. VI 74 pp. 22 figs.

229.—Lebour, M. V. The food of young Herring. J. Mar. Biol. Ass. Plymouth **13** 1924 pp. 325–330.

230.—Legendre, R. *Brama raii* Bl.: sa présence au large des côtes sud de la Bretagne. Bul. soc. zool. Paris **49** 1924 pp. 218–225.

231.—Legendre, R. Note complémentaire sur des squales pèlerins [*Cetorhinus maximus* (Günner)] observés a Concarneau. Bul. soc. zool. Paris **49** 1924 pp. 322–325.

232.—Léger, L. Valeur specifique des trois sortes de Lamproies d' Europe et stades jeunes de *Petromyzon fluviatilis.* C.R. Acad. Sci. Paris **179** 1924 pp. 841–843.

233.—Leigh-Sharpe, W. H. The comparative morphology of the secondary sexual characters of Elasmobranch fishes. The claspers, clasper siphons, and clasper glands. Memoirs VI, VII. J. Morph. Physiol. Philadelphia **39** 1924 pp. 553–566 10 figs., 567–577 15 figs.

234.—Leriche, M. Les "*Pteraspis*" du Dévonien de la Belgique. Bul. soc. géol. paléont. hydr. Bruxelles **33** 1924 pp. 143–159 pls. iii–iv 7 text-figs.

235.—Lissner, H. Das Gehirn der Knochenfische. Wiss. Meeresunters Kiel N. F. **14** 1923 Abt. Helgoland pp. 127–188 pls. iv–vi 42 text-figs.

236.—Lo Giudice, P. Le acciughe dei mari italiani. Nota riassuntiva. Boll. Soc. nat. Napoli **34** 1923 pp. 196–209.

237.—Longley, W. H. Observations on Tortugas fishes. Carnegie Inst. Year Book Washington **23** 1924 pp. 191–193.

238.—Lönnberg, E. Two new Silurids from Lower Congo. Ann. Mag. Nat. Hist. London Ser. 9 **14** 1924 pp. 619–621.

239.—Lönnberg, E. En för Sverige ny Rocka, *Raja naevus* Müll. & Henle. Fauna och Flora Uppsala **1924** pp. 229–234 1 fig.

240.—Lord, C. *Vinculum sexfasciatum,* Richardson, an addition to the fish fauna of Tasmania. Papers and Proc. R. Soc. Tasmania Hobart for **1923** 1924 pp. 43–44.

241.—Lord, C. Fish Fauna of Tasmania. Tasman. Nat. Hobart N.S. **1** 1924 pp. 1–4.

242.—Lukasch, B. S. The Petchora Nelma (*Stenodus leucichthys nelma*), its life and fisheries. (In Russian.) Bul. Bur. Appl. Ichth. Petrograd **2** 1924 pp. 23–50 2 figs.

243.—Lukasch, B. S. On the growth of the Bream (*Abramis brama*) in the southern parts of the Caspian Sea. (In Russian.) Bul. Bur. Appl. Ichth. Petrograd **2** 1924 pp. 87–115.

244.—McCulloch, A. R. Ichthyological items, No. 2. Mem. Queensland Mus. Brisbane **8** 1924 pp. 61–76 pl. xi–xiv 6 text-figs.

Macfarlane, P. R. C. *vide* Menzies, W. J. M.

McGregor, E. A. *vide* Jordan, D. S.

245.—Maier, H. N. und **Scheuring,** L. Entwickelung der Schwimmblase und ihre Beziehungen zum statischen Organ und der Kloake bei Clupeiden, spez. beim Hering. Wiss. Meeresunters. Kiel N.F. **15** 1923 Abt. Helgoland No. 6 22 pp. 2 pls. 12 text-figs.

246.—Manfredi, P. Contributo alla conoscenza delle razze locali dell' Alborella (*Alburnus alborella* De Fil.). Arch. Zool. Napoli **8** 1916 pp. 259–399 pl. 15 1 text-fig.

247.—Manning, F. B. Hearing in the goldfish in relation to the structure of its ear. J. Exp. zool. Philadelphia **41** 1924 pp. 5–20 8 figs.

248.—Manquat, M. Sur le pouvoir oxydant des noyaux de l'épithélium des canalicules rénaux de *Perca fluviatilis*. C.R. Acad. sci. Paris **178** 1924 pp. 972–974.

249.—Maschkowzeff, A. Entwicklung des Urogenitalsystems bei den Knorpelganoiden und einigen anderen Wirbeltieren. Anat. Anz. Jena **59** 1924 pp. 81–93 6 figs.

250.—Mathias, P. Étude du genre *Chondrostoma* dans l'Europe occidentale et la région circumméditerranéenne. Mém. soc. zool. Paris **28** 1921 pp. 1–52 pls. i, ii 2 text-figs.

251.—Mawas, J. Le tissu lymphoide de l'intestin moyen des Cyclostomes (Sa signification morphologique et son rôle physiologique). C.R. Assoc. Anat. Paris **17** 1922 pp. 231–236.

252.—Mawas, J. Recherches histologiques sur le pancreas des Cyclostomes. C.R. Assoc. Anat. Paris **18** 1923 pp. 327–336 3 figs.

253.—Mawas, J. and **Janet,** H. Le pancreas de *Myxine glutinosa*. C.R. Assoc. Anat. Paris **18** 1923 pp. 337–342 2 figs.

254. Maxwell, S. S. Stereotropic reactions of the Shovel-nosed Ray, *Rhinobatus productus*. J. Gen. Physiol. New York **4** 1922 pp. 11–18 2 figs.

255.—Maxwell, S. S. The stereotropism of the Dogfish (*Mustelus californicus*) and its reversal through change of intensity of the stimulus. J. Gen. Physiol. New York **4** 1922 pp. 19–28.

256.—Mayenne, V. A. Zur Frage über die Dauer des Lebens der Fische. Zool. Anz. Leipzig **51** 1924 pp. 235–237.

257.—Mayhew, R. L. The skull of *Lepidosteus platostomus*. J. Morph. Philadelphia **38** 1924 pp. 315–346 4 pls.

258.—Meek, A. Dove Marine Laboratory Report **1924** 121 pp.

259.—Meek, S. E. and **Hildebrand,** S. F. The marine fishes of Panama, Part I. Field Mus. Publ. Zool. Ser. Chicago **15** 1923 No. 215 330 pp. 24 pls.

260.—Menzies, W. J. M. and **Macfarlane,** P. R. C. Salmon investigations in Scotland, 1922. I. Salmon of the River Spey. II. Salmon of the River Dee (Aberdeenshire). Fish. Board Scotland Salmon Fish. **1924** Nos. I & III 54 & 52 pp.

261.—Meschinelli, L. Su di una nuova specie di *Myliobatis* dell' oligocene vicentino. Atti Ist. ven. Venezia **83** 1924 pp. 475–479 pl. iv.

262.—Messmer, C. A. Notes on a rare Atherine (*Rhadinocentrus ornatus*) found upon Moreton Island. Queensl. Nat. Brisbane **4** 1924 pp. 95–96.

Michalski, W. *vide* Hoyer, H.

263.—Mitchell, J. A preliminary reference to a new species of *Elonichthys* from the lower beds of the Newcastle Coal Measures. Proc. Linn. Soc. N. S. Wales Sydney **49** 1924 p. 503 pl. liii A.

264.—Monod, T. Sur le genre *Panturichthys* Pellegrin. Bul. Muséum Paris **1924** pp. 133–134 fig.

265.—Morgera, A. Ricerche sulla morfologia e fisiologia della glandola cecale (appendice digitiforme) degli *Scyllium* e sulla funzione del process vermiforme dell' Uomo e dei Mammiferi. Arch. Zool. Napoli **8** 1916 pp. 121–157 pl. 8 3 text-figs.

266.—Mori, O. Über die Entwicklung des Schädelskelettes des Dornhaies (*Acanthias vulgaris*). Zs. Anat. Entwick. München **73** 1924 pp. 389–430 pls. iv-viii 14 text-figs.

267.—Munthe, H. Ett fynd av vitling i Mälardalens Yoldiamärgel. Geol. För. Forh. Stockholm **46** 1924 pp. 356–357 1 fig.

Murphy, R. C. *vide* Nichols, J. T.

268.—Murray, P. D. F. The motor nerve-endings of the limb muscles of the frog (*Rana temporaria*) and of the muscles of the pectoral fin of the Dogfish (*Squalus acanthias*). Proc. Linn. Soc. N.S. Wales Sydney **49** 1924 pp. 371–385 pls. xxxvii–xliii.

269.—Murray, P. D. F. and **Baker,** J. R. An Hermaphrodite Dogfish (*Scyliorhinus canicula*). J Anat. London **58** 1924 pp. 335–339 5 figs.

270.—Myers, G. S. Mutanda Ichthyologica. Rev. Zool. Africaine Bruxelles **12** 1924 p. 397.

271.—Myers, G. S. A new *Rivulus* from Rio de Janeiro. Ann. Mag. Nat. Hist. London Ser. 9 **13** 1924 pp. 588–590.

272.—Myers, G. S. On the existence of the Japanese Killifish. Ann. Mag. Nat. Hist. Ser. 9 **14** 1924 pp. 253–254.

273.—Myers, G. S. A new Poeciliid Fish from the Congo, with remarks on Funduline Genera. Amer. Mus. Novit. New York **116** 1924 9 pp. 4 figs.

274.—Myers, G. S. A new Poeciliid Fish of the genus *Micropanchax*, from Ubangi. Amer. Mus. Novit. New York **122** 1924 3 pp.

275.—Myers, G. S. A new Poeciliid fish of the Genus *Rivulus*, from British Guiana. Amer. Mus. Novit. New York **129** 1924 2 pp.

276.—Myers, G. S. On a small collection of fishes from Upper Burma. Amer. Mus. Novit. New York **150** 1924 7 pp.

277.—Myers, G. S. A new Characin Fish from Rio de Janeiro. Fish Culturist Philadelphia **4** 1924 pp. 330–331 1 fig.

278.—Myers, G. S. New genera of African Poeciliid fishes. Copeia New York **1924** No. 129 pp. 41–45.

Nayudu, M. R. *vide* Hornell, J.

279.—Nichols, J. T. A contribution to the ichthyology of the Galapagos. Zoologica New York **5** 1924 pp. 63–65 fig. 11.

280.—Nichols, J. T. and **Breder,** C. M. Jr. New Gulf races of a Pacific *Scorpaena* and *Prionotus*, with notes on other Gulf of Mexico fishes. Proc. Biol. Soc. Washington **37** 1924 pp. 21–24 pl. vii.

281.—Nichols, J. T. and **Murphy,** R. C. Long Island Fauna. IV. The Sharks (Order Selachii). Brooklyn Mus. Sci. Bull. Brooklyn **3** 1916 No. 1 34 pp. figs.

282.—Nordqvist, O. Times of entering of the Atlantic Salmon (*Salmo salar* L.) in the rivers. Rapp. et proc.-verb. explor. mer. Copenhagen **33** 1924 pp. 1–58 2 pls.

283.—Nordqvist, O. and **Vallin,** S. Untersuchungen über Aalbrut, ihre Einwanderung in die Ostsee und längs der Ostseeküste Schwedens. Wiss. Meeresunters. Kiel Abt. Helgoland **15** 1923–24 No. 11 32 pp. 3 pls.

284.—Norman, J. R. Note on a flatfish new to the British Fauna. Ann. Mag. Nat. Hist. London Ser. 9 **13** 1924 p. 539.

285.—Norris, H. W. On the function of the paddle of the Paddlefish. Proc. Iowa Acad. Sci. Des Moines **30** 1924 pp. 135–137.

286.—Nusbaum-Hilarowicz, J. Beiträge zur Kenntnis der Organisation des Tiefseefisches *Gastrostomus bairdii* Gill et Ryder. Bul. Intern. Acad. Kraków **1914 B** pp. 120–144 pls 5–7.

287.—Nybelin, O. Några fynd av "sällsyntare" svenska fiskar. Fauna och Flora Uppsala **1924** pp. 13–16.

288.—Oordt, G. J. van. Die Veränderungen des Hodens während des Auftretens der sekundären Geschlechtsmerkmale bei Fischen. I. *Gasterosteus pungitius* L. Arch. mikr. Anat. Entw. Berlin **102** 1924 pp. 379–405 7 figs.

289.—Oordt, G. J. van. The relation of the testis to the secondary sex-characters of the Ten-spined Stickleback. Tijdschr. Ned. Dierk. Ver. Helder Ser. 2 **19** 1924 pp. 52–54.

290.—Oordt, G. J. van. The significance of the interstitium testis in fishes. Proc. K. Akad. Wet. Amsterdam **27** 1924 pp. 161–164.

291.—Otterstrøm, C. V. Ichthyologiske Notitser. III. Dyndsmerlingen (*Cobitis fossilis* L.) i Danmark. IV. Bastarder mellem forskellige Karpefisk. Videns. Medd. nat. For. Kjöbenhavn **76** 1923 pp. 43–53 4 figs.

292.—Otterstrøm, C. V. Regnløgen (*Leucaspius delineatus* Heckel) i Danmark. Flora og Fauna Kjöbenhavn **1924** pp. 21–27.

293.—Paget, G. W. Report on the scales of some teleostean fish with special reference to their method of growth. Ministry Agric. Fish. London Fishery Invest. Series II **4** 1920 No. 3 24 pp. 4 pls.

294.—Panikkar, N. P Further notes on the breeding habits of the Pearl Spot Fish (*Etroplus suratensis*). J. Bombay Nat. Hist. Soc. **29** 1924 p. 1064.

295.—Paris, P. Remarque de nomenclature sur une espèce de Chondrostome parmi les poissons de nos eaux douces. Bul. soc. zool. Paris **49** 1924 pp. 282–283.

296.—Patroni, C. Il grande *Orthagoriscus mola* (Linn.) del Museo zoologico della R. Universita di Napoli e le piu importanti catture di grossi individui della stessa specie nei nostra mari con osservazioni sulle specie affini. Annuario Museo zool. Napoli N. S. **5** No. 4 1923 19 pp. 1 pl.

297.—Pearcy, J. F and **Koppányi,** T. The effects of dislocation of the eye upon the orientation of the Goldfish (*Carassius auratus*). Science New York N.Y. **60** 1924 pp. 502–503.

298.—Pearse, A. S. Amount of food eaten by four species of fresh-water fishes. Ecology Brooklyn N.Y. **5** 1924 pp. 254–258.

299.—Pearson, N. E. The fishes of the eastern slope of the Andes. I. The fishes of the Rio Beni Basin, Bolivia, collected by the Mulford Expedition. Indiana Univ. Studies Bloomington, Ind. **11** 1924 No. 64 83 pp. 12 pls.

300.—Pellegrin, J. Les poissons du Sahara. C.R. ass. franç. avanc. sci. Paris **1923** (Bordeaux) pp. 58–61.

301.—Pellegrin, J. Les Salmonidés du Maroc. C.R. Acad. sci. Paris **178** 1924 pp. 970–972.

302.—Pellegrin, J. Batraciens et poissons du Sud-Est du Maroc et du Sud-Oranais. Bul. Muséum Paris **1924** pp. 178–180.

303.—Pellegrin, J. Le *Salmo Pallaryi* Pellegrin, poisson du Moyen-Atlas marocain. Bul. Muséum Paris **1924** pp. 181–184 1 fig.

304.—Pellegrin, J. Le *Synodontis courteti* Pellegrin, Poisson du Chari et du Niger. Bul. Muséum Paris **1924** pp. 355–356.

305.—Pellegrin, J. Poissons du Niger recueillis par M. Jean Thomas. Description de deux espèces nouvelles. Bul. Muséum Paris **1924** pp. 457–463.

306.—Pellegrin, J. Description de Mormyridés nouveaux récoltés au Congo Belge par le Dr. Schouteden. Rev. Zool. Africaine Bruxelles **12** 1924 pp. 1–8.

307.—Pellegrin, J. Description d'un Siluridé nouveau récolté au Congo Belge. Rev. Zool. Africaine Bruxelles **12** 1924 pp. 487–489.

308.—Pellegrin, J. Poissons de la région de Loango (Gabon) recueillis par M. Baudon. Description de deux espèces et de deux variétés nouvelles. Bul. soc. zool. Paris **49** 1924 pp. 284–291 3 figs.

309.—Pellegrin, J. Description d'un poisson nouveau du Gabon appartenant au genre *Synodontis*. Bul. soc. zool. Paris **49** 1924 pp. 320–322 1 fig.

310.—Pellegrin, J. Batraciens et poissons du Maroc Oriental recueillis par M. Ch. Alluaud. Description d'un Barbeau nouveau. Bul. soc. zool. Paris **49** 1924 pp. 457–461 2 figs.

311.—Pellegrin, J. and Jugeat, —. La présence du *Parazenopsis conchifer* Lowe sur le marché de Paris. Bul. soc. zool. Paris **49** 1924 pp. 35–36.

312.—Pereira, J. R. On the influence of the hydrogen-ion concentration upon the oxygen consumption in sea-water fishes. Biochem. J. Cambridge **18** 1924 pp. 1294–1296.

313.—Perrier, R. La faune de France en tableaux synoptiques illustrés. Fasc. 10: Vertebrés Poissons. Paris 1924 8vo. vii + 212 pp. [N.V.]

Pettinelli, V. *vide* Sammartino, U.

314.—Phillipps, W. J. Life history of the fish *Galaxias attenuatus.* Austral. Zool. Sydney **1** 1919 pp. 211–213.

315.—Phillipps, W. J. Geochemie der Thermalseen der Nordinsel von Neuseeland (mit Beziehungen auf Verschiedene die eingebürgerten Salmoniden betreffenden Fragen). Arch. Hydrobiol. Stuttgart **15** 1924 pp. 370–382.

316.—Phillipps, W. J. The Atlantic Salmon in New Zealand. Nature London **114** 1924 p. 89.

317.—Phillipps, W. J. *Agrostichthys,* a new genus of Ribbon Fishes. Proc. Zool. Soc. London **1924** pp. 539–540 2 figs.

318.—Phillipps, W. J. Food-supply and deterioration of Trout in the Thermal Lakes District, North Island, New Zealand. Trans. Proc. N. Zeal. Inst. Wellington **55** 1924 pp. 381–391.

319.—Phillipps, W. J. A review of the Elasmobranch fishes of New Zealand: No. I. N. Zealand J. Sci. Tech Wellington **6** 1924 pp. 257–269 14 figs.

320.—Phillipps, W. J. The New Zealand Minnow. Notes on the life-history of the New Zealand Minnow (the adult whitebait), *Galaxias attenuatus*). N. Zealand J. Sci. Tech. Wellington **7** 1924 pp. 117–119 1 fig.

321.—Phillipps, W. J. The Koaro: New Zealand's subterranean fish. N. Zealand J. Sci. Tech. Wellington **7** 1924 pp. 190–191 1 fig.

322.—Phillipps, W. J. Occurrence of *Brama raii* in New Zealand. N. Zealand J. Sci. Tech. Wellington **7** 1924 pp. 246–247 1 fig.

323.—Pietruski, S. de S. Beitrag zur Kenntnis der mikroskopischen Anatomie der Verdaungskanals bei den Knochenfischen. Bul. Intern. Acad. Kraków **1914 B** pp. 710–715.

324.—Popta, C. M. L. *Anguilla borneensis* n. sp. Zool. Meded. Leiden **8** 1924 pp. 73–76 fig. 101.

325.—Popta, C. M. L. Lijst van de Nederlandsche visschen aanwezig in 's Rijks Museum van natuurlijke historie te Leiden, tevens eene vermeldung van de tot nu toe in en bij Nederland waargenomen Visschen. Zool. Meded. Leiden **8** 1924 pp. 77–119.

326.—Posthumus, O. Bijdrage tot de kennis der tertiare vischfauna van Nederland. Oligoceene en mioceene otolieten uit het peelgebied en van Winterswijk. Verh. Geol. Mijnb. Gen. (Geol. Ser.) 's-Gravenhage **7** 1923 pp. 105–142 1 pl.

327.—Posthumus, O. Otolithi Piscium. Fossilium Catalogus (C. Diener) I. Animalia. Pars 24 Berlin 1924 42 pp.

328.—Potter, G. E. Food of the Short-nosed Gar-Pike (*Lepidosteus platystomus*) in Lake Okoboji, Iowa. Proc. Iowa Acad. Sci. Des Moines **30** 1924 pp. 167–170.

329.—Powers, E. B. The physiology of the respiration of fishes in relation to the hydrogen-ion concentration of the medium. J. Gen. Physiol. New York **4** 1922 pp. 305–317.

330.—Prawdin, I. F. Zur Frage über den sogenannten "*Rutilus pigus*" aus dem Kaspisee. (In Russian.) Bull. Bur. Appl. Ichth. Petrograd **2** 1924 pp. 130–147 1 fig. (Resumé in German.)

331.—Prawdin, I. F. Description of some forms of the Russian Roach. *Rutilus rutilus* (L.) varietas γ. The Roach from Lake Pestovo, Novgorod government. (In Russian.) Bul. Bur. Appl, Ichth. Petrograd **2** 1924 pp. 149–166.

332.—Pruvost, P. Description d'un fossile nouveau (*Scapellites cottoni* nov. gen. et sp.) du Westphalien supérieur du Couchant de Mons. Ann. Soc. sci. Bruxelles **42** 1922 Pt. 1 pp. 150–155 1 pl.

333.—Prytherch, H. F. The ichthyophthirius disease of fishes and methods of control. Rep. U. S. Fish. Com. Washington for **1923** 1924 App. IX 6 pp. 10 figs.

334.—Ramalho, A. Sur la morphologie de l'organe interrénal antérieur des Téléostéens. C. R. Assoc. Anat. Paris **18** 1923 pp. 435–438 6 figs.

335.—Ranzi, S. La chiusura dell' otocisti, lo sviluppo del ductus endolymphaticus (o recessus labyrinthi overro aquaeductus vestibuli) e la sua omologia nella serie dei Vertebrati. Atti Acc. Lincei Roma Ser. 5 **33** Sem. 1 1924 pp. 448–451.

336.—Reed, H. D. The morphology and growth of the spines of Siluroid fishes. J. Morph. Philadelphia **38** 1924 pp. 431–451 12 figs.

337.—Regan, C. T. The morphology of a rare oceanic fish, *Stylophorus chordatus*, Shaw; based on specimens collected in the Atlantic by the "Dana" Expeditions, 1920–1922. Proc. R. Soc. London B **96** 1924 pp. 193–207 12 figs.

338.—Regan, C. T. Reversible evolution with examples from fishes. Proc. Zool. Soc. London **1924** pp. 175–176.

339.—Regan, C. T. A young Swordfish (*Xiphias gladius*), with a note on *Clupeolabrus*. Ann. Mag. Nat. Hist. London Ser. 9 **13** 1924 pp. 224–225 1 fig.

340.—Reinhard, L. Die Entwicklung des Parablasts und seine Bedeutung bei Teleostiern nebst der Frage über die Entstehung der Urgeschlechtszellen. Arch. mikr. Anat. Entw. Berlin **103** 1924 pp. 339–356 11 figs.

341.—Remotti, E. Mécanismes de défense dans les migrations verticales des oeufs de Téléostéens. Arch. internat. Physiol. Liège-Paris **22** 1923 pp. 202–207.

342.—Remotti, E. Déformation permanente (désagregation) et dégradation protéique de la capsule des oeufs des Murénoides. Arch. internat. Physiol. Liège-Paris **22** 1923 pp. 225–229.

343.—Remotti, E. Contribution à la physiologie de la goutte d'huile dans les oeufs de Téléostéens. Arch. internat. Physiol. Liège-Paris **22** 1923 pp. 229–232.

344.—Remotti, E. Adaptations défensives de l'organisme embryonnaire des Téléostéens. Arch. internat. Physiol. Liège-Paris **23** 1924 pp. 57–60.

345.—Remotti, E. Sulla funzione della vescica natatoria dei teleostei considerata come organo di senso. (Ricerche sperimentali.) Riv. Biol. Roma **6** 1924 pp. 343–350.

346.—Rendahl, H. Beiträge zur Kenntnis der marinen Ichthyologie von China. Ark. Zool. Stockholm **16** No. 2 1924 37 pp. 2 figs.

347.—Romer, A. S. Pectoral limb musculature and shoulder-girdle structure in fish and tetrapods. Anat. Rec. Philadelphia **27** 1924 pp. 119–143 10 figs.

348.—Roule, L. Un cas remarquable de métamorphoses complexes chez un poisson. (Notice préliminaire.) Bul. soc. zool. Paris **49** 1924 pp. 102–108 3 figs.

349.—Roule, L. Présentation d'un monstre double gastéropage de la Truite d'Europe (*Salmo fario*, L.). Bul. Muséum Paris **1924** p. 271.

350.—Roule, L. and **Angel,** F. Notice préliminaire (IVe et dernière) sur les larves et les alevins de poissons recueillis par S. A. S. le Prince Albert Ier de Monaco dans ses croisières (années 1905 à 1915). Bul. Inst. Ocean Monaco **451** 1924 7 pp.

351.—Roule, L. et **Bertin,** L. Notice preliminaire sur la collection des Nemichthydés recueillie par l'expedition du Dana (1921–1922), suivie de considérations sur la classification de cette section des poissons apodes. Bul. Muséum Paris **1924** pp. 61–67.

352.—Rubner, M. Aus dem Leben des Kaltblüters. I. Teil: Die Fische. Biochem. Zs. Berlin **148** 1924 pp. 222–267.

353.—Rückert, J. Über den Urmund und die zu ihm in Beziehung stehenden Entwicklungsvorgänge im hinteren Körperabschnitt der Selachierembryonen. Morph. Jahrb. Leipzig **53** 1924 pp. 165–210 4 pls.

354.—Rüger, L. Über einen Lepidosteiden aus dem Gips des mittleren Muschelkalkes von Seckach (Nord-Baden). Jahresber. oberrhein. geol. Ver. Stuttgart **13** 1924 pp. 112–114 1 fig.

355.—Rüger, L. Über eine Fischfauna aus den untersten Arietenschichten von Malsch in der Langenbrückener Senke. Centralbl. Min. Stuttgart **1924** pp. 723–735 7 figs.

356.—Ryke, W. de. Fish foods in relation to fish culture. Proc. Iowa Acad. Sci. Des Moines **30** 1924 pp. 163–166.

357.—Sammartino, U. and **Pettinelli,** V. La catalasi nei primi stati di sviluppo del "*Salmo fario.*" Riv. Biol. Roma **6** 1924 pp. 467–490.

358.—Santucci, R. Nuovi studi sui pesci fossili della Liguria. Boll. Soc. geol. ital. Pisa **41** 1923 pp. 195–213 p. iii.

359.—Scheminzky, F. Über das Auftreten der Galvanotaxis bei Forellenembryonen. Zs. Biol. München **80** 1924 pp. 23–34 3 figs.

360.—Scheminzky, F. Versuche über Elektrotaxis und Elektronarkose. Arch. ges. Physiol. Berlin **202** 1924 pp. 200–216.

361.—Scheminzky, F. and **Gauster,** F. Beiträge zur physikalisch-chemischen Biologie der Forellenentwicklung. I. Mitteilung. Die Schädigung der Membran des Forelleneies durch den elektrischen Strom. Arch. mikr. Anat. Entw. Berlin **101** 1924 pp. 1–39.

Scheuring, L. *vide* Maier, H. N.

362.—Schiemenz, P. Die Nahrung unserer Süsswasserfische. Naturwiss. Berlin **12** 1924 pp. 522–528.

363.—Schmidt, J. The transatlantic migration of the Eel-larvae. Nature London **113** 1924 p. 12 1 fig.

364.—Schmidt, J. L'immigration des larves d'Anguille, dans la Méditerranée par le détroit de Gibraltar. C. R. Acad. Sci. Paris **179** 1924 pp. 729–733 3 figs.

365.—Schmidt, P. Sur la correlation des organes dans l'organisme animal. (In Russian.) Bul. Acad. Sci. Russ. Petrograd Ser. 6 **10** 1916 pp. 887–894 1 pl. 1 text-fig.

366.—Schmidt, W. J. Über die thermische Verkürzung der Elastoidinfäden der Haie und die begleitenden optischen Erscheinungen. Zs. Biol. München **81** 1924 pp. 193–207.

367.—Schnakenbeck, W. Ueber Färbungsanomalien bei Pleuronectiden. Wiss. Meeresunters. Kiel N. F. **15** 1923 Abt. Helgoland No. 10 20 pp. 1 pl.

368.—Schneider, R. Das Gesetz vom Eisen in Zähnen und andern Knochengebilden der Fische und Amphibien. Arch. Natg. Berlin Abt. A **90** Heft. 4 1924 pp. 49–58.

369.—Schroeder, W. C. Fisheries of Key West and the Clam industry of Southern Florida. Rep. U. S. Fish. Com. Washington for **1923** 1924 App. XII 74 pp. 29 figs.

Scofield, E. C. *vide* Snyder, J. O.

Seale, A. *vide* Evermann, B. W.

Seale, A. *vide* Jordan, D. S.

370.—Sella, M. Caratteri differenziali dei giovani stadi di *Orcynus thynnus* Ltkn., *O. alalonga* Risso, *Auxis bisus* Bp. Atti Acc. Lincei Roma Ser. 5 **33** Sem. 1 1924 pp. 300–305.

371.—Sella, M. Osservazioni su lo sviluppo e l'anatomia del miotomo nei Teleostei. Atti Acc. Lincei Roma Ser. 5 **33** Sem. 1 1924 pp. 364–367.

372.—Sella, M. Osservazioni riguardanti l'innervazione del miotomo dei Murenoidi e di altri Teleostei. (Nota preliminare). Atti Acc. Lincei Roma Ser. 5 **33** Sem. 2 1924 pp. 66–70 4 figs.

373.—Senna, A. Sull' organo respiratorio soprabranchiale degli Ofiocefalidi e sua semplificazione in *Parophiocephalus* subgen .n. Monitore zool. ital Siena **35** 1924 pp. 149–160 pl. viii 2 text-figs.

374.—Sewertzoff, A. N. The development of the dorsal fin in *Polypterus delhesi.* J. Morph. Philadelphia **38** 1924 pp. 551–580 14 figs.

375.—Sewertzoff, A. N. and **Disler,** N. N. Das Pharyngomandibulare der Selachier. Anat. Anz. Jena **58** 1924 pp. 345–349 4 figs.

376.—Shann, E. W. Further observations on the myology of the pectoral region in fishes. Proc. Zool. Soc. London **1924** pp. 195–215 4 figs.

Silvester, C. F. *vide* Fowler, H. W.

377.—Silvestri, A. Brevi note Paleontologiche. Atti Pont. Acc. Roma N. Lincei **76** 1923 pp. 232–240 4 figs.

378.—Smith, B. G. Notes on the nesting habits of *Cottus.* Papers Michigan Acad. Sci. New York **2** 1923 pp. 221–222.

379.—Snyder, J. O. Notes on certain Catostomids of the Bonneville System, including the type of *Pantosteus virescens* Cope. Proc. U. S. Nat. Mus. Washington **64** Art. 18 1924 6 pp.

380.—Snyder, J. O. A third report on the return of King Salmon marked in 1919 in Klamath River. California Fish and Game Sacramento **10** 1924 pp. 110–114 2 pls.

381.—Snyder, J. O. and **Scofield,** E. C. An experiment relating to the homing instinct of King Salmon. California Fish and Game Sacramento **10** 1924 pp. 9–17 7 figs.

382.—Somov, P. M. On food and growth of the Bream in different lakes of Prussia. (In Russian.) Bul. Bur. Appl. Ichth. Petrograd **2** 1924 pp. 57–85.

383.—Sowerby, A. de C. The Mandarin fish. China J. Sci. Arts Shanghai **2** 1924 pp. 236–238 1 pl.

384.—Spartà, A. Contributo alla conoscenza dello sviluppo larvale in *Uraleptus Maraldii* Risso. Atti Acc. Lincei Roma Ser. 5 **33** Sem. **2** 1924 pp. 191–193.

Speidel, C. C. *vide* Jordan, H. E.

385.—Stärk, F. Histologische Studien an dem Schwimmblasengang und der Schwimmblase der Renken. Zs. Anat. Entwick. München **70** 1924 pp. 308–312.

386.—Starks, E. C. *Hime,* a new genus of fishes related to *Aulopus.* Copeia New York **1924** No. 127 p. 30.

387.—Steinmann, P. and **Surbeck,** G. Beiträge zur Toxikologie der Fische. I. Teil. Rev. Hydrol. Aarau **1** 1920 pp. 53–99, 193–242.

388.—Steinmann, P. and **Surbeck,** G. Beiträge zur Toxikologie der Fische. II Tiel. Rev. Hydrol. Aarau **2** 1922 pp. 111–149.

389.—Storrow, B. Herring investigations. I.—Herring shoals. Dove Marine Lab. Rep. **1924** pp. 8–30 1 fig.

390.—Storrow, B. Plankton Investigations, 1921–22. III.—Marine Plankton. (11) Fish eggs and young stages. Rep. Dove Mar. Lab. **1923** pp. 141–150.

391.—Stoyanow, A. Sur les débris d'*Amia* des dépôts tertiaires du système de l'arête Manrak, district de Zaïssan, province de Sémipalatinsk. Bul. Com. Géol. Petrograd **34** 1915 pp. 487–507 pls. xv–xvii.

392.—Stringham, E. The maximum speed of fresh-water fishes. Amer. Nat. New York **58** 1924 pp. 156–161.

393.—Supino, F. Osservazioni sul potere tossico del siero di sangue di alcuni pesci. Rend. Ist. lomb. Milano Ser. 2 **56** 1923 pp. 926–934.

Surbeck, G. *vide* Steinmann, P.

Swart, D. B. *vide* Bonde, C. von.

394.—Tanaka, S. Figures and descriptions of the fishes of Japan. **33** 1924 pp. 607–628 pls. cxlviii–cl.

395.—Tchougounow, N. L. Etude sur la nourriture de jeunes poissons de la région du Volga et de la mer Caspienne. Part I, Vobla (*Rutilus rutilis caspicus* Jack). (In Russian.) Trav. Lab. Ichth. Astrachan **3** fasc. 0 1918 111 pp. (Resumé in French.)

396.—Tereschenko, K. K. La brême (*Abramis brama* L.) de la région du Volga et de la mer Caspienne, son industrie et la biologie. (In Russian.) Trav. Lab. Ichth. Astrachan **4** fasc. **2** 1917 129 pp. [Resumé in French.]

397.—Thielemann, M. Einige Beobachtungen über das Wachstum der Seezunge (*Solea vulgaris* Quensel) und ihr Vorkommen im nordfriesischen Wattenmeer. Wiss. Meeresunters Kiel N. F. **11** 1916 Abt. Helgoland pp. 201–216 pl. xxi.

398.—Thomas, A. Studies on the absorption of metallic salts by fish in their natural habitat. II. The absorption of nickel by *Fundulus heteroclitus.* J. Biol. Chem. Baltimore **58** 1923–24 pp. 671–674.

399.—Thompson, D'A. W. The John Dory (*Zeus faber*) in Scottish waters. Wiss. Meeresunters. Kiel N. F. **15** 1923 Abt. Helgoland No. 8 10 pp.

400.—Thompson, H. Haddock biology. II. Frequency and distribution of the age classes in 1923. Sci. Invest. Fish. Edinburgh **1924** No. I 48 pp. 4 pls. 9 charts.

401.—Thompson, W. F. Notes from the State Fisheries Laboratory. California Fish and Game Sacramento **10** 1924 pp. 143–144.

402.—Tretiakov, D. La couverture de la corde des selachéens et des ganoïdes. I, II. (In Russian.) Bul. Acad. Sci. Russ. Petrograd Ser. 6 **15** 1921 pp. 585–630 11 figs.

403.—Ulrey, A. B. and **Greeley,** P. O. The marine fishes (Teleostei) of Southern California. Bul. S. Cal. Acad. Sci. Los Angeles **23** 1924 pp. 55–58, 102–105, 133–136.

Vallin, S. *vide* Nordqvist, O.

404.—Veit, O. Beiträge zur Kenntnis des Kopfes der Wirbeltiere. II. Frühstadien der Entwicklung des Kopfes von *Lepidosteus osseus* und ihre prinzipielle Bedeutung für die Kephalogenese der Wirbeltiere. Morph. Jahrb. Leipzig **53** 1924 pp. 320–390 7 figs.

405.—Vialli, M. La pseudobranchia dello spiracolo nei Ganoidi e nei Selaci. (Nota preventiva.) Natura Milano **15** 1924 pp. 73–75.

406.—Vialli, M. Ricerche sulla pseudobranchie dei pesci. (Nota preventiva.) Atti Soc. ital sc. nat. Milano **63** 1924 pp. 10–20 2 figs.

407.—Vinciguerra, D. Recenti catture di *Selache maxima* nel mare Ligure. Rend. Union. Zool. ital. Genova (Monit. zool. ital. **35** 1924 Annesso 11) pp. 36–37.

408.—Vinciguerra, D. Descrizione di un ciprinide cieco proveniente dalla Somalia Italiana. Ann. Museo Civ. st. nat. Genova **51** 1924 pp. 239–243 2 figs.

409.—Vutskits, G. Fauna Regni Hungariae. Pisces. Budapest 1918 42 pp.

410.—Waite, E. R. The Fishes of South Australia. Handbooks Flora and Fauna S. Australia. Adelaide 1923 8vo. 243 pp. figs.

411.—Waite, E.R. Illustrations of and notes on some Australian Fishes. Rec. S. Aust. Mus. Adelaide **2** 1924 pp. 479–487 pls. xxix–xxxi 2 text-figs.

412.—Wakiya, Y. The Carangoid fishes of Japan. Ann. Carnegie Mus. Pittsburg **15** 1924 pp. 139–244 pls. xv–xxxviii.

413.—Weber, H. Liebesspiele, Eiübertragung und Copulation bei *Hippocampus brevirostris.* Zool. Anz. Leipzig **60** 1924 pp. 281–290 7 figs.

414.—Weiler, W. Beiträge zur Kenntnis der tertiären Fische des Mainzer Beckens, I. Abh. geol. Landesanst. Darmstadt **6** 1922 pp. 71–135 3 pls.

415.—Welsh, W. W. and **Breder,** C. M. Jr. A contribution to the life history of the Puffer, *Spheroides maculatus* (Schneider). Zoologica New York **2** 1922 pp. 261–276 figs. 80–96.

416.—Welsh, W. W. and **Breder,** C. M. Jr. Contributions to life histories of Sciaenidae of the Eastern United States Coast. Bul. Bur. Fish. Washington **39** 1924 pp.141–201 60 figs.

417.—Wheeler, J. F. J. The growth of the egg in the Dab (*Pleuronectes limanda*). Q. J. Microsc. Sci. London **68** 1924 pp. 641–660.

418.—Willer, A. Die kleine Maräne (*Coregonus albula* L.) in Ostpreussen. Intern. Rev. Hydrobiol. Leipzig **12** 1924 pp. 248–265.

419.—Wilser, J. L. *Pygopterus Crecelii* n. sp. aus dem oberen Buntsandstein bei Karlsruhe i B. Ber. natf. Ges. Freiburg i. B. **23** 1923 pp. 68–78 1 fig.

420.—Wintrebert, P. La place de la cavité gastrulaire et le mode de croissance du blastoderme chez les poissons cartilagineux. C.R. Assoc. Anat. Paris **16** 1921 pp. 87–94 2 figs.

421.—Wintrebert, P. La reprise du double battement rythmé, du type musculaire primitif et d'origine aneurale après l'ablation des centres bulbo-medullaires, chez les embryons de *Scylliorhinus canicula* L. Gill. C.R. Assoc. Anat. Paris **16** 1921 pp. 95–97.

422.—Wolleback, A. Norges fisker. Kristiania 1924 8vo 239 pp. 256 figs.

423.—Wood, H. Observations on the Scottish summer Herring fishing of 1922. Sci. Invest. Fish. Edinburgh **1923** No. II 42 pp. 1 chart.

424.—Woodward, A. S. On a Hybodont shark (*Tristychius*) from the calciferous sandstone series of Eskdale (Dumfries-shire). Q. J. Geol. Soc. London **80** 1924 pp. 338–342 5 figs.

425.—Woodward, A. S. The animals of the carboniferous period, with special reference to discoveries in Yorkshire. Naturalist London **1924** pp. 105–117 8 figs.

426.—Woodward, A. S. Note préliminaire sur la découverte d'un nouveau poisson du calcaire carbonifère de Belgique. Ann. Soc. géol. Belgique Liége **47** 1924 p. B 39.

427.—Woodward, A. S. Un nouvel Elasmobranche (*Cratoselache Pruvosti* gen. et sp. nov.) du calcaire carbonifère inférieur de Denée. Livre Jubil. Cinquant. fond Soc. Geol. Belgique 1924 pp. 59–62 1 pl.

428.—Wunder, W. Der Einfluss verschiedenfarbigen Lichter gleicher Intensität auf den Ablauf der Bewegungsvorgänge in der Telostierretina. Verh. D. Zool. Ges. Berlin **29** 1924 pp. 73–76.

429.—Wyman, L. C. Blood and nerve as controlling agents in the movements of melanophores. J. Exp. Zool. Philadelphia **39** 1924 pp. 73–131 1 pl. 6 text-figs.

430.—Wyman, L. C. The reactions of the melanophores of embryonic and larval *Fundulus* to certain chemical substances. J. Exp. Zool. Philadelphia **40** 1924 pp. 161–180.

431.—Ziegelmayer, W. Über den Einfluss von Inkreten auf den quellungszustand von *Leuciscus*-Eiern. Arch. mikr. Anat. Entw. Berlin **102** 1924 pp. 359–362 3 figs.

432.—Zwaardemaker, H. and Feenstra, T. P. Pulsations du coeur de *Petromyzon* et de la Grenouille sous l'influence de l'émanation après enlèvement du potassium diffusible. C. R. soc. biol. Paris **90** 1924 pp. 1145–1147.

II.—SUBJECT INDEX.

GENERAL.

Review of faunistic, systematic, and biological work of recent years; BERTIN, **33, 34**: history of Hamilton-Buchanan's "Fishes of the Ganges"; GUDGER, **144**.

ECONOMICS.

Fisheries of Key West, Florida; SCHROEDER, **369**: fish culture; KENDALL, **207**: RYKE, **356**: LEACH, **227, 228**: toxicology of fishes; STEINMANN & SURBECK, **387, 388**: fish as larvicides; EIGENMANN, **101**.

Investigations on—L. Nipigon fishes; CLEMENS & OTHERS, **64**: Italian *Acipenser*; ANCONA, **12**: *Acipenser rubicundus*; HARKNESS, **151**: *Acipenser ruthenus*; HOLZMAYER, **161**: *Clupea harengus*; COWAN, **70**: JOHANSEN, **186, 187**: STORROW, **389**: WOOD, **423**: *Clupea pilchardus*; BUEN, **52**: *Alosa sapadissima*; BORODIN, **38**:

Caspialosa; KISSELEVITCH, **211**: *Sardinella longiceps*; HORNELL & NAYUDU, **167**: *Engraulis encrasicholus*; LO GIUDICE, **236**: *Salmo salar*; CALDERWOOD, **55**: HUTTON, **178-180**: MENZIES & MACFARLANE, **260**: NORDQVIST, **282**: *Oncorhynchus nerka*; GILBERT, **132**: *O. tschawytscha*; SNYDER, **380**: SNYDER & SCOFIELD, **381**: *Coregonus albula*; DOMRATSCHEFF, **88**: *C. clupeaformis*; LEACH, **227**: *Cristivomer namaycush*; LEACH, **227**: *Salvelinus fontinalis*; LEACH, **228**: *Thymallus* spp.; LEACH, **227**: *Thymallus arcticus*; KOSHANTSCHIKOV, **214**: *Osmerus eperlanus*; DOMRATSCHEFF, **88**: *Stenodus leucichthys*; LUKASCH, **242**: *Abramis brama*; LUKASCH, **243**: SOMOV, **382**: TERESCHENKO, **396**: *Anguilla vulgaris*; EICHELBAUM, **100**: HORNYOLD, **168-171**: NORDQVIST & VALLIN, **283**: *Lucioperca sandra*; FREIDENFELT, **119**: Tunnies; ATHANASSOPOULOS, **19**: *Scomber scomber*; EHRENBAUM, **98**: *Trigla gurnardus, T. hirundo*; HERTLING, **158**: *Gadus aeglifinus*; THOMPSON, **400**: *Pleuronectes platessa*; BUCHANAN-WOLLASTON, **49**: *Solea vulgaris*; THIELEMANN, **397**.

Scale and otolith reading.—BORODIN, **38**: BUCHANAN-WOLLASTON, **50**: FARRAN, **107**: FREIDENFELT, **119**: HARKNESS, **151**: HORNYOLD, **171**: HUTTON, **178-181**: PAGET, **293**: SNYDER, **380**: STORROW, **389**: THIELEMANN, **397**: THOMPSON, **400**.

STRUCTURE.

General.—Anatomy of *Gastrostomus bairdii*; NUSBAUM-HILAROWICZ, **286**: of *Stylophorus chordatus*; REGAN, **337**: cranial anatomy of fishes; DE BEER, **77**: of *Acipenser*; KURZ, **225**: visceral arches; DE BEER, **77**.

Histology.—ABOLIN, **2**: CHAMPY, **59**: COGNETTI DE MARTIIS, **65**, **66**: DUTTA, **96**: FICALBI, **108**: JORDAN & SPEIDEL, **199**: MAWAS, **252**: MAWAS & JANET, **253**: MURRAY, **268**: PIETRUSKI, **323**: STÄRK, **385**: TRETIAKOV, **402**: VIALLI, **406**.

Cytology.—BOWIE, **39**: GEISER, **127**: OORDT, **288**: REINHARD, **340**: WHEELER, **417**.

Tegumentary System. — Epidermis; COGNETTI DE MARTIIS, **65**: FICALBI, **108**: scales; PAGET, **293**: lips; MATHIAS, **250**: nostrils; DERSCHEID, **85**: teeth; †CHAPMAN & CUDMORE, **60**: DEGENER, **81**: †ERASMO, **102**: dorsal fin; SEWERTZOFF, **374**: fin spines; REED, **336**: pigment; BECHER, **24**: LONGLEY, **237**: SCHNÄKENBECK, **367**: poison gland; EVANS, **105**: luminous organs; HARVEY, **152**.

Nervous System.—Spinal cord; TRETIAKOV, **402**: brain; BÄCKSTROM, **22**: KUDO, **223**: LISSNER, **235**: nerves; COGNETTI DE MARTIIS, **67**: DE BEER, **76**, **77**, **78**: MURRAY, **268**: SELLA, **372**: VIALLI, **406**: sense organs—lateral line; COGNETTI DE MARTIIS, **66**: nasal organs; DERSCHEID **85**: eyes; DÜCKER, **94**: COGNETTI DE MARTIIS, **67**: auditory organ; FIEBRIGER, **109**: HARKNESS, **151**: MAIER & SCHEURING, **245**: MANNING, **247**: RANZI, **335**.

Alimentary System.—Palatal organ; FUDAKOWSKI, **125**: pharyngeals; BREDER & CRAWFORD, **44**: alimentary canal; ABOLIN, **2**: BREDER & CRAWFORD, **44**: MAWAS, **251**: PIETRUSKI, **323**: rectal gland; MORGERA, **265**: liver; CHEVEY, **61**: DUTTA, **96**: spleen; MAWAS, **251**: pancreas; MAWAS, **252**: MAWAS & JANET, **253**: air bladder; GREENE, **139**: HALL, **146**: MAIER & SCHEURING, **245**: STÄRK, **385**.

Myology.—ROMER, **347**: SELLA, **371**, **372**: SHANN, **376**.

Osteology.—General; HORA, **164**: skull; ALLIS, **10**: DERSCHEID, **85**: GUASTELLA, **143**: HAGUE, **145**: KINDRED, **210**: †KRUIZINGA, **210**: MAYHEW, **257**: MORI, **266**: STARKS, **386**: visceral arches; ALLIS, **10**: DEGENER, **81**: DE BEER, **77**: SEWERTZOFF & DISLER, **375**: Weberian ossicles, FIEBRIGER, **109**: pectoral girdle; ROMER, **347**.

Vascular System.—BURNE, **54**: DE BEER, **76**, **77**: GELDEREN, **128**: JORDAN & SPEIDEL, **199**: KEIBEL, **206**: HOYER & MICHALSKI, **172**.

Respiratory System. — Accessory respiratory organs; SENNA, **373**: pseudobranchiae; GRANEL, **136**, **137** VIALLI, **405**, **406**.

Reproductive System. — General; MASCHKOWZEFF, **249**: testis; CHAMPY, **59**: OORDT, **288, 290**: mixopterygia of Selachians; LEIGH-SHARPE, **233**: hermaphrodites; BREDER, **41**: DE BEER, **79**: MURRAY & BAKER, **269**: intromittent organ of *Gambusia*; ARTOM, **16**.

Excretory System.—DUTTA, **96**: MASCHKOWZEFF, **249**: RAMALHO, **334**.

Special Glands.—BOWIE, **39**: DE BEER, **80**.

DEVELOPMENT.

General.—Metamorphosis of *Petromyzon*; COTRONEI, **68, 69**: sex differentiation; ANCONA, **11**.

Eggs.—BUCHANAN-WOLLASTON, **49**: DELSMAN, **82**: EHRENBAUM. **98**: KIEN-TSING, **209**: KISSELEVITCH, **211**: KRAMP, **218**: LEACH, **227, 228**: REINHARD, **340**: REMOTTI, **341-344**: SAMMARTINO & PETTINELLI, **357**: SCHEMINZKY & GAUSTER, **361**: STORROW, **390**: VEIT, **404**: WELSH & BREDER, **415, 416**: WHEELER, **417**: WINTREBERT, **420**: ZIEGELMAYER, **431**.

Embryos.—CHEVEY, **61**: HOYER & MICHALSKI, **172**: REINHARD, **340**: REMOTTI, **344**: RUCKERT, **353**: SCHEMINZKY, **359**: VEIT, **404**: WELSH & BREDER, **415, 416**: WINTREBERT, **420**: WYMAN, **430**.

Larvae and young.—BUEN, **51**: DELSMAN, **82**: EHRENBAUM, **98, 99**: HORA, **165**: JOHANSEN, **187**: KASANSKY, **204**: KRAMP, **218**: LÉGER, **232**: REGAN, **337**: ROULE, **348**: ROULE & ANGEL, **350**: SCHMIDT, **363, 364**: SELLA, **370**: SPARTA, **384**: STORROW, **390**: WELSH & BREDER, **415, 416**: WYMAN, **430**.

Organogeny. — Myotomes; SELLA, **371, 372**: sclerotomes; ANCONA, **13**: head segments and eye-muscles; DE BEER, **76**: head; DE BEER, **76**: VEIT, **404**: vertebral column; DE BEER, **76**: chondrocranium; DE BEER, **77**: skull and visceral arches; DE BEER, **76**: KINDRED, **210**: MORI, **266**: SEWERTZOFF & DISLER, **375**: teeth and dentary bone; DEGENER, **81**: dorsal fin; SEWERTZOFF, **374**: fin spines; REED, **336**: liver; CHEVEY, **61**: air bladder; MAIER & SCHEURING, **245**: blood vessels; DE BEER, **77**: GELDEREN, **128**: lymphocytes; JORDAN & SPEIDEL, **199**: brain; BÄCKSTROM, **22**: nerves; DE BEER, **78**: SELLA, **372**: vesicular organ of Lamprey; DE BEER, **80**: eyes; DÜCKER, **94**: auditory labyrinth; RANZI, **335**: urinogenital system; MASCHKOWZEFF, **249**: gametogenesis; GEISER, **127**: OORDT, **288**: REINHARD, **340**.

PHYSIOLOGY.

(Including experimental and chemical.)

Fishes of an acid lake; JEWELL & BROWN, **185**: physical and chemical influences on migration; CHIDESTER, **63**: form and function of *Amphisile*; BRUNELLI, **47**: growth; RUBNER, **352**: muscle contraction; SCHMIDT, **366**: embryonic movements; KASANSKY, **205**: WINTREBERT, **421**: stability (factors determining); KRONEKER, **219**: eyes and orientation; PEARCY & KOPPÁNYI, **297**: factors determining number of vertebrae; KYLE, **226**: reactions of vocal apparatus; GREENE, **139**: contact reactions; MAXWELL, **254, 255**: heart-beats; CROZIER & HUBBS, **73**: ZWAARDEMAKER & FEENSTRA, **432**: hearing; MANNING, **247**: function of Weberian apparatus; FIEBIGER, **109**: of fins; KRONEKER, **219**: of spleen; MAWAS, **251**: of rectal gland of Selachians; MORGERA, **265**: of air bladder; GREENE, **140**: HALL, **146**: REMOTTI, **345**: gases of air bladder; GREENE, **138, 140**: intestinal respiration; ABOLIN, **2**: respiration and locomotion; BREDER, **43**: role of nucleus in oxydation; MANQUAT, **248**: hydrogen-ion concentration and respiration; POWERS, **329**: PEREIRA, **312**: effect of extreme temperatures; BRITTON, **45**: of changes in salinity; DUVAL, **97**: of narcotics on respiration; HARA, **150**: of temperature on number of vertebrae; HUBBS, **173**: of electricity; SCHEMINZKY, **359, 360**: SCHEMINZKY & GAUSTER, **361**: of coloured lights on retina; WUNDER, **428**: of chemicals on melanophores; WYMAN, **430**: ambicoloration and albinism; SCHNAKENBECK, **367**: reactions of melanophores; WYMAN, **429**: colour changes; ABOLIN, **1**: FRISCH, **122**; LONGLEY, **237**: luminescence and phosphorescence; DUBOIS, **93**; GREENE,

& GREENE, **141**: HARVEY, **152**: chemical composition of tissues; BRUCE **46**: Arginase, etc., in organs; BERLIN & KUTSCHER, **32**: HUNTER & DAUPHINEE, **176, 177**: iron in bones and teeth; SCHNEIDER, **368**: absorption of nickel; THOMAS, **398**: venom and toxins; ISHIWARA, **183**: STEINMANN & SURBECK, **387, 388**: SUPINO, **393**: metamorphosis of Lamprey; COTRONEI, **68, 69**: tension, etc., of egg-membrane; REMOTTI, **341, 344**: catalase in eggs and embryos; SAMMARTINO & PETTINELLI, **357**: influence of inkreten on eggs; ZIEGELMAYER, **431**: hormones and secondary sexual characters; OORDT, **288, 289, 290.**

ETHOLOGY.

General.—See Copeia, New York, **1924.** Habits of :—Punjab fishes; KHAN, **208**: American Cyprinidae; BREDER & CRAWFORD, **44**: elvers; EICHELBAUM, **100**: ATHANASSOPOULOS, **20**: NORDQVIST & VALLIN, **283**: *Polyodon spathula*; NORRIS, **285**: *Scleropages leichhardtii*; BANCROFT, **23**: *Salmo salar*; CALDERWOOD, **55**: *S. shasta*; LEACH, **228**: *Salvelinus fontinalis*; LEACH, **228**: *Cristivomer namaycush*; LEACH, **227**: *Coregonus clupeaformis*; LEACH, **227**: *Stenodus leucichthys*; LUKASCH, **242**: *Thymallus* spp.; LEACH, **227**: *Catostomus commersonii*; HUBBS & CREASER, **175**: *Hippocampus brevirostris*; WEBER, **413**: *Etroplus suratensis*; PANIKKAR, **294**: *Scomber scomber*; EHRENBAUM, **98**: GALTSOFF, **126**: *S. Colias*; GALTSOFF, **126**: *Orcynus thynnus*; BUEN, **53**: *Trigla gurnardus, T. hirundo*; HERTLING, **158**: *Cottus meridionalis*; SMITH, **378.** Biology, life-history of :—American Sciaenidae; WELSH & BREDER, **416**: *Petromyzon*; COTRONEI, **68, 69**: Italian *Acipenser*; ANCONA, **12**: *Sardinella longiceps*; HORNELL & NAYUDU, **167**: *Engraulis encrasicholus*; LO GIUDICE, **236**: *Salmo salar*; HUTTON, **181**: *Thymallus arcticus*; KOSHANTSCHIKOV, **214**: *Galaxias attenuatus*; PHILLIPPS, **314, 320**: *Abramis brama*; TERESCHENKO, **396**: *Anguilla vulgaris*; CUNNINGHAM, **74**: *Gadus aeglifinus*; THOMPSON, **400**: *Spheroides maculatus*; WELSH & BREDER, **415.** Habitat of *Salvelinus fontinalis*; HANKINSON, **148.** Terrestial habits of fishes; BACCIALON, **21.** Dispersal of fishes; CHIDESTER, **63.** Locomotion; BREDER, **43.** Speed; STRINGHAM. **392.** Acclimatisation; CHEVEY, **62**: PHILLIPPS, **316.** Length of life; MAYENNE, **256.** Vitality of Plaice; COWAN, **71.**

Breeding. — BUCHANAN-WOLLASTON, **49**: CALDERWOOD, **55**: CHIDESTER, **63**: EHRENBAUM. **98**: KHAN, **208**: KISSELEVITCH, **211**: PANIKKAR, **294**: SMITH, **378**: WEBER, **413.**

Migration.— ATHANASSOPOULOS, **19**: BUEN, **53**: CHIDESTER, **63**: CUNNINGHAM, **74**: EICHELBAUM, **100**: GALTSOFF, **126**: GILBERT, **132**: NORDQVIST, **282**: NORDQVIST & VALLIN, **283**: PHILLIPPS, **314**: SCHMIDT, **363, 364**: SNYDER, **380**: SNYDER & SCOFIELD, **381**: THOMPSON, **399**: WELSH & BREDER, **416.**

Distribution.—BERG, **26, 27.**

Diseases.—JOHNSTONE, **118**: KRYSHANOWSKY, **221**: LEACH, **228**: PRYTHERCH, **333.**

Food.—BIGELOW, **35**: BREDER & CRAWFORD, **44**: CLEMENS & OTHERS, **64**: DERJAVINE, **83, 84**: EHRENBAUM, **98**: HARKNESS, **151**: HORNELL & NAYUDU, **167**: KRAATZ, **217**: LEACH, **227, 228**: LEBOUR, **229**: LEGENDRE, **230**: LUKASCH, **243**: PEARSE, **298**: PHILLIPPS, **318**: POTTER, **328**: RYKE, **356**: SCHIEMENZ, **362**: SOMOV, **382**: TCHOUGOUNOW, **395**: WELSH & BREDER, **415, 416.**

VARIATION AND EVOLUTION.

Evolution.—REGAN, **338**; VEIT, **404.** Blind fishes.—VINCIGUERRA, **408.** Hybrids.—OTTERSTRØM, **291.** Hermaphrodites.—BREDER, **41**; DE BEER, **79**; MURRAY & BAKER, **269.** Variation and heredity.—ARCHEY, **15**; BERESOWSKY, **25**; DUNCKER, **95**; HANCE, **147**; HUBBS, **173**; KISSELEVITZ, **212**; KYLE, **226**; MANFREDI, **246**; MATHIAS, **250**; PRAWDIN, **331**; WELSH & BREDER, **415**; WILLER. **418.** Ambicoloration, etc., in Flatfishes.—ARCHEY, **15**; SCHMIDT, **365**; SCHNAKENBECK, **367.** Teratology.—ANUTSCHIN, **14**; CROZIER & HUBBS, **73**; KRYSHANOWSKY, **221**; ROULE, **349.** Sex ratio, etc.—ANCONA, **11**; ARTOM, **17**; GEISER, **127.**

DISTRIBUTION.

(*a*) MARINE.

Arctic Zone.—Northern Europe; BERG, 27.

Subarctic and North Temperate Zones.—N. Atlantic; REGAN, 337: ROULE & BERTIN, 351: Norway; WOLLEBACK, 422: Sweden; LÖNNBERG, 239: NYBELIN, 287: North Sea; HERTLING, 158: Britain; NORMAN, 284: THOMPSON, 399: Irish Atlantic Slope; FARRAN, 107: Holland; POPTA, 325: France, JOUBIN & DANOIS, 200: LEGENDRE, 230, 231: PERRIER, 313: Spain; BUEN, 51: Mediterranean; ATHANASSOPOULOS, 19: BUEN, 51: EHRENBAUM, 99: ISNARD, 184: LO GIUDICE, 236: PATRONI, 296: VINCIGUERRA, 407: Black-Sea; DRENSKY, 90, 91: Caspian Sea; KISSELEVITZ, 212: China; RENDAHL, 346: Japan; TANAKA, 394: WAKIYA, 412: California; JORDAN, 193: THOMPSON, 401: ULREY & GREELEY, 403: America (Atlantic); BREDER, 42: NICHOLS & MURPHY, 281.

Tropical Zone.—Atlantic; ROULE & BERTIN, 351: W. Africa; DERSCHEID, 86: MONOD, 264: S. Africa and Natal; BONDE, 36: BONDE & SWART, 37: GILCHRIST & BONDE, 133, 134: India; FOWLER, 111: HORA, 163, 164: Siam; HORA, 165: Indo-China; CHABANAND, 56, 57, 58: Indo-Australian Archipelago; DELSMAN, 82: Australia; MCCULLOCH, 244: MESSMER, 262: China; RENDAHL, 346: Philippines; HERRE, 154, 157: Hawaiian Isds; FOWLER & BALL, 115: GILBERT, 131: JORDAN & EVERMANN, 196: Samoa; FOWLER & SILVESTER, 116: JORDAN & SEALE, 198: Oceania; JORDAN & SEALE, 198: Galapagos Is.; NICHOLS, 279: Panama (Pacific); MEEK & HILDEBRAND, 259: ROULE & BERTIN, 351: S. California; ULREY & GREELEY 403: Panama (Atlantic); MEEK & HILDEBRAND, 259: W. Indies; EVERMANN & SEALE, 106: Gulf of Mexico; NICHOLS & BREDER, 280: Florida; SCHROEDER, 369.

South Temperate Zone.—S. Africa; BONDE, 36: BONDE & SWART, 37: GILCHRIST & BONDE, 133, 134: Australia; MCCULLOCH, 244: WAITE, 410, 411: Tasmania; LORD, 240, 241: New Zealand; PHILLIPPS, 316, 317, 319, 322: S. America (Atlantic) DEVINCENZI, 87.

(*b*) FRESHWATER.

Palaearctic.—Europe:—general; MATHIAS; 250: Norway; WOLLEBACK, 422: Denmark; OTTERSTRØM, 291, 292: Holland; POPTA, 325: France; PERRIER, 313: Prussia; WILLER, 418: Hungary and Balkan States; VUTSKITS, 409: DRENSKY, 89, 92: KOWATSCHEW, 215, 216: KULMATYCKI, 224: Greece; ATHANASSOPOULOS, 18: Russia; BERESOWSKY, 25: BERG, 26-31: DOMRATSCHEFF, 88: KISSELEVITZ, 212: PRAWDIN, 330, 331: China; FOWLER, 110, 114: SOWERBY, 383: Japan; MYERS, 272.

Nearctic.—Canada; COX, 72: FOWLER 113: KOELZ, 213: United States; BREDER & CRAWFORD, 44: FOWLER, 113: HANKINSON, 149: HILDEBRAND, 159: HUBBS, 174: JEWELL & BROWN, 185: JORDAN, 190-192: JORDAN & MCGREGOR, 197: KOELZ, 213: SNYDER 379.

Indian.—Continent; FOWLER, 112: HORA, 162: Burma; MYERS, 276: Siam; HORA, 165: Borneo; POPTA, 324: Philippines; HERRE, 155, 156: China; FOWLER, 110: SOWERBY, 383.

Ethiopian.—Africa; AHL, 4, 6-9: GIANFERRARI, 130: LÖNNBERG, 238: MYERS, 273, 274, 278: PELLEGRIN, 300-310: VINCIGUERRA, 408.

Neotropical.—S. America; AHL, 3, 5: DEVINCENZI, 87: MYERS, 271, 275, 277: PEARSON, 299.

Australian.—S. Australia; WAITE, 410: New Zealand; Phillipps, 315, 316, 321.

(*c*) FOSSIL.

General; POSTHUMUS, 327: Devonian; BRANSON, 40: BRYANT, 48: LERICHE, 234: Carboniferous; FRÉDÉRIX, 118: PRUVOST, 332: WOODWARD, 424-427: Permo-carboniferous; KARPINSKIJ, 201-203: MITCHELL, 263: Triassic; FRENTZEN, 121: HAUGHTON, 153: RÜGER, 354: WILSER, 419: Jurassic; FROST, 123: RÜGER, 355: Cretaceous to Eocene; IHERING, 182:

Cretaceous; ERASMO, **103, 104**: GRABAU, **135**: GREGORY, **142**: HOLLSTEIN, **160**: KRUIZINGA, **210**: SILVESTRI, **377**: Tertiary; CHAPMAN & CUDMORE, **60**: FRANCESCHI, **117**: STOYANOW, **391**: WEILER, **414**: Oligocene; FROST, **124**: MESCHINELLI, **261**: POSTHUMUS, **326**: Miocene; ERASMO, **102**: FRENGUELLI, **120**: FROST, **124**: JORDAN, **189, 195**: KRYSHTAFOVICH, **222**: POSTHUMUS, **326**: Pliocene; GEMMELLARO, **129**: SANTUCCI, **358**: Pleistocene; MUNTHE, **267**.

III.—SYSTEMATIC.

GENERAL WORKS.

Edible marine fishes of France, JOUBIN & DANOIS **200**; fishes of France, PERRIER **313**; of Holland, POPTA **325**; of Norway, WOLLEBACK **422**; of Hungary, VUTSKITS **409**; of Black Sea, DRENSKY **91**; of South Australia, WAITE **410**; of Tasmania, LORD **241**; tertiary fishes of Victoria, CHAPMAN & CUDMORE **60**; fishes of Samoa and Oceania, JORDAN & SEALE **198**; of Hawaiian Isds., GILBERT **131**; JORDAN & EVERMANN **196**; of Sandy Hook Bay, N.Y., BREDER **42**; edible fishes of Key West, Fla., SCHROEDER **369**; marine fishes of California, ULREY & GREELEY **403**; fishes of Panama, MEEK & HILDEBRAND **259**; of Uruguay, DEVINCENZI **87**.

MARSIPOBRANCHII.

Homologies of skull, ALLIS **10**; eyes, DÜCKER **94**.

PETROMYZONIDAE.

Petromyzon epidermis, FICALBI **108**; pancreas, MAWAS **252**; problematical organ in nasal capsule, DE BEER **80**: *P. marinus*, LÉGER **232**.

Lampetra fluviatilis, LÉGER **232**; metamorphosis, reduction in length, etc., COTRONEI **68, 69**: *L. planeri*, LÉGER **232**.

MYXINIDAE.

Myxine glutinosa pancreas, MAWAS & JANET **253**.

SELACHII.

†*Cratoselache* **gen. n.**, *pruvosti* **sp. n.** Carboniferous Belgium, WOODWARD Ann. Soc. géol. **47** p. B 39; Livre Jubil. Cinquant. fond. Soc. Geol. Belgique **1924** p. 59 pl. i.

†*Scapellites* **gen. n.**, *cottoni* **sp. n.** Carboniferous Belgium, believed to be egg-cases of a Selachian, PRUVOST Ann. Soc. sci. Bruxelles **42** p. 150 pl.

EUSELACHII.

Skull, GUASTELLA **143**; forebrain, BÄCKSTROM **22**; mixopterygia, LEIGH-SHARPE **233**.

PLEUROTREMATA.

Of Long Island, N. Y., NICHOLS & MURPHY **281**; of New Zealand, PHILLIPPS **319**.

LAMNIDAE.

Cetorhinus maximus from Concarneau, LEGENDRE **231**; from Gulf of Genoa, VINCIGUERRA **407**.

Carcharodon megalodon, *rondeleti* Miocene Argentine, FRENGUELLI **120**; *C. arnoldi* Miocene (?) Philippines, KRYSHTAFOVICH **222** p. 155 pl.

Lamna cornubica vascular system, BURNE **54**.

SCYLIORHINIDAE.

Scyliorhinus rectal gland, MORGERA **265**; *S. canicula* hermaphrodite, MURRAY & BAKER **269**.

CARCHARIIDAE.

Carcharinus natator **sp. n.** Panama, MEEK & HILDEBRAND Field Mus. Pub. Zool. Ser. **15** No. 215 p. 40 pl. i fig. 1.

Carcharias victoriae **sp. n.** Tertiary Australia, CHAPMAN & CUDMORE Proc. R. Soc. Vict. **36** p. 118 pl. ix figs. 17–18.

Scoliodon longurio p. 52 pl. ii fig. 1, *lalandii* p. 53 pl. ii fig. 2, *terrae-novae* p. 55 pl. ii fig. 3, descr. and fig., MEEK & HILDEBRAND t.c.

Mustelus californicus contact reactions, MAXWELL **255**.

†HYBODONTIDAE.

†Edestidae, fragments from Permo-Carboniferous Russia, KARPINSKIJ **203**.

†*Helicoprion clerki* **sp. n.** Permo-Carboniferous Russia, KARPINSKIJ Bul. Acad. Sci. Russ. (6) **10** p. 701 figs.; *H. ivanovi* **sp. n.** Permo-Carboniferous Russia, KARPINSKIJ Bul. Acad. Sci. Russ. (6) **16** p. 369 figs; *H. bezsonowi* Permo- Carboniferous Russia, FRÉDÉRIX **118**.

†*Tristychius arcuatus* Carboniferous Scotland, WOODWARD **424**.

CESTRACIONTIDAE.

Heterodontus philippi prootic somites, DE BEER **75**; devel. of head and vertebral column, DE BEER **76**.

Cestracion longidens **sp. n.** Tertiary Australia, CHAPMAN & CUDMORE Proc. R. Soc. Vict. **36** p. 113 pl. ix fig. 10.

SQUALIDAE.

Squalus acanthias devel. of skull, MORI **266**; *S. acanthias, blainvillii* from Black Sea, DRENSKY **90**.

Centrina dertonensis **sp. n.** Pliocene Italy, SANTUCCI Boll. Soc. geol. ital. **41** p. 197 pl. iii fig. 7.

Centroscymnus fuscus **sp. n.** S. Africa, GILCHRIST & BONDE Rep. Fish. M. Biol. Survey S. A. **3** (vii) p. 2.

SQUATINIDAE.

Squatina gippslandicus **sp. n.** Tertiary Australia, CHAPMAN & CUDMORE Proc. R. Soc. Vict. **36** p. 136 pl. xi fig. 47; *S. crecelii* **sp. n.** Tertiary Germany, WEILER Abh. geol. Land. Darmstadt **6** p. 94 pl. iii figs. 23–25.

HYPOTREMATA.

Of South Africa, BONDE & SWART **37**.

PRISTIDAE.

Pristis recurvidens **sp. n.** Tertiary Australia, CHAPMAN & CUDMORE Proc. R. Soc. Vict. **36** p. 138 pl. x figs. 34 35.

TORPEDINIDAE.

Heteronarce regani **sp. n.** Natal, BONDE & SWART Rep. Fish. M. Biol. Survey S. A. **3** (V) p. 14 pl. xxii fig. 2.

RHINOBATIDAE.

Rhinobatus tesselatus Cretaceous Germany, HOLLSTEIN **160**; *R. productus* contact reactions, MAXWELL **254**.

RAIIDAE.

Raia albalinea p. 6 pl. xx fig. 1, *leopardus* p. 7 pl. xx fig. 2, *caudaspinosa* p. 8 pl. xxi fig. 1, *parcomaculata* p. 9 pl xxi fig 2, *durbanensis* p. 11 pl. xxii fig. 1, **spp. n.** S. Africa; *R. capensis, quadrimaculata, stabuliformis,* descr.; BONDE & SWART Rep. Fish. M. Biol. Survey S. A. **3** (V): *R. naevus* from Sweden, LÖNNBERG **239**.

TRYGONIDAE.

Trygon poison gland, EVANS **105**.

Anacanthobatis **gen. n.** p. 18, *marmoratus* p. 18 pl. xxiii, *dubius* p. 19, **spp. n.** S. Africa, BONDE & SWART Rep. Fish. M Biol. Survey S.A. **3** (V).

MYLIOBATIDAE.

Myliobatis altavillae **sp. n.** Oligocene Italy, MESCHINELLI Atti Ist. Ven. **83** p. 475 pl. iv; *M. affinis* p. 139 pl. x fig. 36, *prenticei* p. 140 pl. x fig. 37, **spp. n.** Tertiary Australia, CHAPMAN & CUDMORE Proc. R. Soc. Vict. **36**; *M. meyeri* **nom. n.** = *M. serratus* Leriche *nec* Meyer, WEILER Abh. geol. Land. Darmstadt **6** p. 100 pl. iii figs. 1, 3.

HOLOCEPHALI.

†*Edaphodon mirabilis* **sp. n.** Tertiary Australia, CHAPMAN & CUDMORE Proc. R. Soc. Vict. **36** p. 142.

PISCES.

PALAEOPTERYGII.

†PALAEONISCIDAE.

†*Elonichthys davidi* **sp. n.** Permian or Carboniferous Australia, MITCHELL Proc. Linn. Soc N. S. Wales **49** p. 503 pl. liii A.

†*Pygopterus crecelii* **sp. n.** Triassic Germany, WILSER Ber. natf. Ges. Freiburg i. B. **23** p. 68 fig.

ACIPENSERIDAE.

Acipenser cranial anatomy, KURZ **225**; biology of Italian spp., ANCONA

12; *A. rubicundus* food, rate of growth, HARKNESS **151**; *A. ruthenus* age determination from pectoral ray, HOLZMAYER **161**.

POLYODONTIDAE.

Polyodon spathula function of rostrum, NORRIS **285**.

NEOPTERYGII.

Brain, LISSNER **235**; catalogue of otoliths, POSTHUMUS **327**; Pliocene otoliths from Sicily, GEMMELLARO **129**.

The following new species, etc., are based on otoliths:—*Cepola lanceolata* **sp. n.** Tertiary Germany, WEILER Abh. geol. Land. Darmstadt **6** p. 78 pl. i figs. 2–3: *O.* (*Scopelus*) *circularis* p. 608 pl. 61 fig. 2, *O.* (*Physiculus*) *bicaudatus* p. 608 pl. 61 fig. 5, *O.* (*Merluccius*) *pukeuriensis* p. 609 pl. 61 fig. 7, *O.* (*Ophidiidarum*) *elongatus* p. 611 pl. 61 fig. 11, *O.* (*Elops*) *miocaenicus* p. 612 p. 62 fig. 14, *O.* (*Parapercis*) *finlayi* p. 613 pl. 62 fig. 20, *O.* (*Citharus*) *latisulcatus* p. 614 pl. 62 fig. 23, **spp. n.** Oligocene and Miocene New Zealand; *O.* (*Raniceps*) *planus novae-zeelandiae* **var. n.** Miocene New Zealand; FROST Trans. N. Z. Inst. **55**: *O.* (*Leptolepididarum*) *simplex* p. 140 pl. v fig. 1, *plicatilis* p. 140 pl. v fig. 2, *cristatus* p. 141 pl. v fig. 3, *cuneiformis* p. 141 pl. v fig. 4, *elongatus* p. 142 pl. v fig. 5, *pentangulatus* p. 142 pl. v fig. 6, **spp. n.** Jurassic Buckinghamshire and Wiltshire, FROST Ann. Mag. N. H. (9) **14**: *O.* (*Percidarum*) *acuminatus* p. 111 figs. 9–10, *liesselensis* p. 112 figs. 11–12, *limburgensis* p. 113 figs. 13–14, *O.* (*Sciaenidarum*) *staringi* p. 114 fig. 15, *O.* (*Trigla*) *schuberti* p. 115 figs. 18–19, *O.* (*Phycis*) *elongatus* p. 119 figs. 28–29, *O.* (*Hymenocephalus*) *globosus* p. 120 figs. 30–31, *medius* p. 120 figs. 32–33, *ovalis* p. 120 figs. 34–35, *asymmetricus* p. 121 figs. 36–37, *brinki* p. 121 figs. 38–39, *dubius* p. 121, *O.* (*Macrurus*) *pusillus* p. 122 figs. 40–41, *debilis* p. 122 figs. 44–45, *O.* (*Ophidiidarum*) *swalmensis* p. 123 figs. 48–49, *O.* (*Gonostoma* ?) *angustus* p. 128 figs. 60–61, *O.* (*Clupea*) *priemi* p. 131 figs. 66–67, *O.* (*Inc. sedis*) *pulensis* p. 133 figs. 69–70, **spp. n.** Tertiary Holland, POSTHUMUS Verh. Geol. Mijnb. Gen. (Geol. Ser.) **7**.

PROTOSPONDYLI.

†SEMIONOTIDAE.

†*Lepidotus* (?) *lacotanus* **sp. n.** Cretaceous Dakota, GREGORY Amer. Mus. Novit. **134** figs.

†*Semionotus capensis*, HAUGHTON **153**.

†MACROSEMIIDAE.

†*Petalopteryx elegans* Cretaceous Italy and Yugo-Slavia, ERASMO **104**.

AMIIDAE.

Amia calva prootic somites, DE BEER **75**; chondrocranium, HAGUE **145**; devel. of dentary and teeth, DEGENER **81**; *A.* (*Pappychthys*) *barroisi, robusta*, Tertiary Russia, STOYANOW **391**.

†PYCNODONTIDAE.

†*Coelodus materanus* **sp. n.** Cretaceous Italy, SILVESTRI Atti Pont. Acc. Roma N. Lincei **76** p. 237 fig. D; ERASMO **103**.

GINGLYMODI.

LEPIDOSTEIDAE.

Lepidosteus osseus devel. of head, VEIT **404**; *L. platystomus* skull, MAYHEW **257**; food, POTTER **328**.

ISOSPONDYLI.

Nasal organs, DERSCHEID **85**.

†LEPTOLEPIDAE.

†*Lycoptera ferox* **sp. n.** p. 181, *L. sinensis* descr. p. 180, Cretaceous China, GRABAU Bul. geol. Surv. China **5**.

CLUPEIDAE.

Devel. of air-bladder, relations with ear, cloaca, etc., MAIER & SCHEURING **245**; descriptions of Indian spp., FOWLER **111**.

Clupea harengus, COWAN **70**; JOHANSEN **186, 187**; STORROW **389**; WOOD **423**; food of young, LEBOUR **229**; *C. bassanii* p. 72 pl. xiv (I) fig. 3, *glyptopoma* p. 75 pl. xiv (I) fig. 4, **spp. n.** Oligocene Italy, FRANCESCHI Paleontogr. Ital. **28**.

Sardina pilchardus biology, F. DE BUEN **52**.

Sardinella longiceps life-history, HORNELL & NAYUDU **167**.

Alosa sapidissima scale reading, BORODIN **38**.

Caspialosa spawning, fertility, KISSELEWITCH **211**; food of Russian spp., DERJAVINE **84**; revision of Caspi-Volga spp., *C. caspia nigra* **subsp. n.** Caspian Sea, KISSELEVITZ Board Fish. Moscow 1923 résum. p. 2 pl. iv fig. 50.

Ilisha melanota **sp. n.** W. Africa, DERSCHEID Rev. Zool. Africaine **12** f. 2 p. 278; *I. argentata* p. 190 pl. ix, *caribbaea* p. 191 pl x fig 1, **spp. n.** Panama, MEEK & HILDEBRAND Field Mus. Pub. Zool. Ser. **15** No. 215.

Pristigaster (?) *dolloi*, DERSCHEID t.c. p. 282.

Odontognathus compressus **sp. n.** Panama p. 194 pl. xi fig. 2; *P. panamensis* descr. and fig. p. 194 pl. xi fig. 1; MEEK & HILDEBRAND t.c.

Engraulis hornelli **sp. n.** India, FOWLER J. Bombay N. H. Soc. **30** p. 41; *E. encrasicholus*, LO GIUDICE **236**.

Anchovia brevirostra p. 198 pl. xii fig. 1, *elongata* p. 198 pl. xii fig. 2, *arenicola* p. 201 pl. xiii fig. 1, *parva* p. 202 pl. x fig. 2, *eigenmannia* p. 205 pl. xiv fig. 2, **spp. n.** Panama; *A. ischana* p. 203 pl. xiii fig. 2, *brownii* p. 204 pl. xiv fig. 1, *panamensis* p. 207 pl. xv fig. 1, *mundeola* p. 208 pl. xv fig. 2, descr. and fig.; MEEK & HILDEBRAND t.c.

Coilia macrognathus aequidentata **subsp. n.** Indo-China, CHABANAUD Bul. Mus. Paris **1924** p. 59.

†*Diradias* **gen. n.**, *aratus* **sp. n.** Miocene California, JORDAN Bul. S. Cal. Acad. Sci. **23** p. 42 pl. F.

SALMONIDAE.

Of Morocco, PELLEGRIN **301**; in thermal lakes of New Zealand, PHILLIPPS **315**.

Salmo salar, HUTTON **178–180**; MENZIES & MACFARLANE **260**; life-history, HUTTON **181**; breeding, CALDERWOOD **55**; times of ascent of rivers, NORDQVIST **282**; in New Zealand, PHILLIPPS **316**; *S. trutta* hermaphrodite, DE BEER **79**; *S. lewisi, levenensis, fario*, LEACH **228**; *S. fario* lymphatic system of embryo, HOYER & MICHALSKI **172**; *S.* (*Trutta*) *pallayeri* **sp. n.** Morocco, PELLEGRIN Bul. Mus. Paris **1924** p. 182 fig., and Bul. Soc. zool. France **49** p. 458 fig. 1; *S. rosei* **sp. n.** California, JORDAN & MCGREGOR Proc. Acad. N. S. Philad. **76** p. 19 pl. ii; *S. shasta*, LEACH **228**.

Oncorhynchus tschawytscha, SNYDER **380**, SNYDER & SCOFIELD **381**; *O. nerka* migrations, GILBERT **132**.

Salvelinus fontinalis, LEACH **228**; habitat in Michigan, HANKINSON **148**.

Cristivomer namaycush, LEACH **227**.

Stenodus leucichthys nelma habits etc., LUKASCH **242**.

Coregonus Russian spp., BERESOWSKY **25**; *C. clupeaformis*, LEACH **227**; *C. albula*, BERG **30**; in East Prussia, WILLER **418**; *C. fera* pigment, etc., BECHER **24**.

Leucichthys alpenae p. 1, *reighardi* p. 5, **spp. n.** Great Lakes, KOELZ Occ. Pap. Mus. Zool. Ann Arbor **146**.

Thymallus arcticus biology, KOSHANTSCHIKOV **214**; *T. arcticus pallasi*, BERG **29**; *T. signifer, montanus, ontariensis*, LEACH **227**.

ARGENTINIDAE.

Hyalorhynchus **gen. n.**, *natalensis* **sp. n.** Natal, GILCHRIST & BONDE, Rep. Fish. M. Biol. Survey S. A. **3** (VII) p. 4 pl. i fig. 1.

OSMERIDAE.

Osmerus eperlanus, BERG **30**.

SALANGIDAE.

Leucosoma chinense, FOWLER **110**.

GALAXIIDAE.

Galaxias huttoni, PHILLIPPS **321**; *G. attenuatus* life-history, PHILLIPPS **314,320**.

STERNOPTYCHIIDAE.

Polyipnus spinosus from Gulf of Mexico, NICHOLS & BREDER **280**.

GONOSTOMATIDAE.

Yarrella africana **sp. n.** S. Africa, GILCHRIST & BONDE Rep. Fish. M. Biol. Survey S. A. **3** (VII) p. 8 pl. i fig. 2.

ASTRONESTHIDAE.

Astronesthes capensis **sp. n.** S. Africa, GILCHRIST & BONDE Rep. Fish. M. Biol. Survey S. A. **3** (VII) p. 5.

STOMIATIDAE.

Leptostomias **gen. n.** p. 606, *macronema* **sp. n.** Hawaii p. 607 pl. 72 fig. 3, GILBERT Bul. U. S. Fish. Com. **23** 1905.

Melanostomias niger **sp. n.** S. Africa, GILCHRIST & BONDE Rep. Fish. M. Biol. Survey S. A. **3** (VII) p. 6 pl. ii fig. 2.

MORMYRIDAE.

Petrocephalus binotatus **sp. n.** Belgian Congo, PELLEGRIN Rev. Zool. Afric. **12** p. 1.

Marcusenius intermedius p. 2, *aequipinnis* p. 3, **spp. n.** Belgian Congo, PELLEGRIN t.c.

Stomatorhinus ater **sp. n.** Belgian Congo, PELLEGRIN t.c. p. 4.

Gnathonemus echidnorhynchus p. 5, *macrophthalmus* p. 6, *compressirostris* p. 7, **spp. n.** Belgian Congo, PELLEGRIN t.c.

OSTARIOPHYSI.

CYPRINOIDEA.

CHARACIDAE.

Clupeacharax **gen. n.**, *anchoveoides* **sp. n.** Bolivia, PEARSON Indiana Univ. Stud. **11** (64) p. 47 pl. xi fig. 2, pl. vii fig. 3.

Pyrrhulina beni **sp. n.** Bolivia, PEARSON t.c. p. 32.

Hyphessobrycon ellisi **sp. n.** Bolivia, PEARSON t.c. p. 39 pl. x fig. 2; *H. flammeus* **sp. n.** Brazil, MYERS Fish Culturist **4** p. 330 fig.

Astyanacinus multidens **sp. n.** Bolivia, PEARSON t.c. p. 41 pl. ix fig. 4.

Hemibrycon beni **sp. n.** Bolivia, PEARSON t.c. p. 42 pl. ii fig. 6.

Bryconamericus bolivianus p. 43 pl. x fig. 4, *hemigrammus* p. 44, **spp. n.** Bolivia, PEARSON t.c.

Acrobrycon **gen. n.** type *Tetragonopterus ipanquianus*, PEARSON t.c. p. 44.

Piabina beni **sp. n.** Bolivia, PEARSON t.c. p. 45 pl. x fig. 5.

Megalamphodus rogoaguae **sp. n.** Bolivia, PEARSON t.c. p. 33 pl. x fig. 3.

Monotocheirodon **gen. n.**, *pearsoni* **sp. n.** Bolivia, PEARSON t.c. p. 34 pl. xi fig. 1.

Prodontocharax **gen. n.** p. 35, *melanotus* **sp. n.** Bolivia p. 36 pl. xii figs. 1–2 text-fig. 4, PEARSON t.c.

Hemigrammus rhodostomus **sp. n.** Brazil, AHL Woch. Aquar. Terr. **1924** No. 18; *H. candovittatus* **sp. n.** Argentine, AHL Zool. Anz. **58** p. 360.

ANOSTOMIDAE.

Curimatus binotatus **sp. n.** Bolivia, PEARSON Indiana Univ. Stud. **11** (64) p. 28 pl. ix fig. 1.

Prochilodus beni **sp. n.** Bolivia, PEARSON t.c. p. 29 pl. ix fig. 2.

Laemolyta fasciata **sp. n.** Bolivia, PEARSON t.c. p. 29 pl. x fig. 1.

HEMIODONTIDAE.

Characidium bolivianum **sp. n.** Bolivia, PEARSON Indiana Univ. Studies **11** (64) p. 31 pl. ix fig. 3.

CITHARINIDAE.

Citharinus thomasi **sp. n.** Niger, PELLEGRIN Bul. Mus. Paris **1924** p. 461.

Nannocharax parvus maculata **var. n.** Gaboon, PELLEGRIN Bul. soc. zool. France **49** p. 285.

Phagoborus **nom. n.** for *Neoborus* Boulenger praeocc., MYERS Rev. Zool. Afr. **12** p. 397.

CATOSTOMIDAE.

Catostomus commersonii food and growth of young, BIGELOW **35**; HUBBS & CREASER **175**.

Pantosteus virescens, *platyrhynchus* redescr., SNYDER **379**.

CYPRINIDAE.

Descr. and figs. of North American spp., FOWLER **113**; of Indian spp., FOWLER **112**; of Chinese spp., FOWLER **114**; of Philippines, HERRE Philippine J. Sci. **24** p. 249; larvae of Russian spp., KASANSKY **204**.

Danio synopsis of spp. p. 2, *D. strigillifer* **sp. n.** Burma p. 1, MYERS Amer. Mus. Novit. **150**.

Rasbora taytayensis **sp. n.** Philippines, HERRE t.c. p. 264.

Fundulichthys virescens is a *Pseudorasbora* (?), MYERS **272**.

Leucaspius delineatus in Denmark, OTTERSTRØM **292**.

Leuciscus taxonomy of allied genera, JORDAN **192**; *L. vandoisulus* food, etc., BREDER & CRAWFORD **44**; *L. virgo*, PRAWDIN **330**; *L. erythropthalmus* × *Abramis blicca*, hybrid, OTTERSTRØM **291**.

Pfrille **gen. n.** type *Phoxinus neogaeus*, JORDAN Copeia **1924** p. 71.

Rutilus rutilus of Russia, PRAWDIN **331**; pigment, BECHER **24**; *R. rutilus caspicus* food of young, TCHOUGOUNOW **395**; *R. pigus*, PRAWDIN **330**.

Phoxinus czekanowskii czekanowskii, KULMATYCKI **224**.

Phoxiscus kikuchii = *Fusania ensarca*, FOWLER **110**.

Notropis procne, *cornutus* food, etc., BREDER & CRAWFORD **44**; *N. hudsonius*, *blennius* no. of vertebrae, HUBBS **173**.

Rhinichthys atronasus food, etc., BREDER & CRAWFORD **44**.

Exoglossum maxillingua food, etc., BREDER & CRAWFORD **44**.

Semotilus bullaris food, etc., BREDER & CRAWFORD **44**.

Chondrostoma revision of Western European and circum-Mediterranean spp., MATHIAS **250**; *C. toxostoma* = *C. genei*, PARIS **295**.

Campostoma anomalum food, KRAATZ **217**.

Hybopsis notes, JORDAN **191**.

Erimonax **gen. n.** type *Ceratichthys monacus*, JORDAN Copeia **1924** p. 52.

Alburnus chacoides aralensis, BERG **31**; *A. alborella* variation, races, MANFREDI **246**.

Alburnoides bipunctatus rossicus **subsp. n.** Russia, BERG Bul. Appl. Ichth. **2** p. 56.

Abramis brama food, growth, DERJAVINE **83**; LUKASCH **243**; SOMOV **382**; biology, TERESCHENKO **396**; *A. brama* × *Leuciscus rutilus*, × *Aspius alburnus*, hybrids, OTTERSTRØM **291**.

Rhodeus maculatus is the young of *Paracheilognathus imberbis*, FOWLER **110**.

Carassius auratus inheritance of dove-tails and telescope-eyes, HANCE **147**.

Barbus garmani p. 81 fig. 4, *barbouri* p. 83 fig. 5, *annandalei* p. 87 fig. 6, *carletoni* p. 89 fig. 7 **spp. n.** India, FOWLER Proc. Acad. N. S. Philad. **76**; *B. moulouyensis* **sp. n.** Morocco, PELLEGRIN Bul. soc. zool. France **49** p. 459 fig. 2; *B. nicholsi* **sp. n.** Burma, MYERS Amer. Mus. Novit. **150** p. 3; *B. bomokandi* **nom. n.** = *B. rubripinnis* Nichols & Griscom *nec.* Cuv. & Val., MYERS Rev. Zool. Afr. **12** p. 397; *B. camptacanthus melanepiptera* **var. n.** Gaboon, PELLEGRIN Bul. soc. zool. France **49** p. 288.

Phreatichthys **gen. n.**, *andruzzii* **sp. n.** Italian Somaliland, VINCIGUERRA Ann. Mus. Civ. st. nat. **51** p. 240 figs.

Cephalakompsus **gen. n.**, *pachycheilus* **sp. n.** Philippines HERRE t.c. p. 276 pl. ii fig. 2.

Ospatulus **gen. n.** p. 277, *truncatulus* p. 278 pl. ii fig. 1, *palaemophagus* p. 279, **spp. n.** Philippines, HERRE t.c.

Barbodes synopsis of Philippine spp. p. 281; *B. tumba* p. 285, *clemensi* p. 293, *amara* p. 295, *flavifuscus* p. 296, *lanaoensis* p. 300, *katolo* p. 301, *manalak* p. 302, *lindog* p. 304, *palata* p. 305, **spp. n.** Philippines; HERRE t.c.

Hampala lopezi **sp. n.** Philippines, HERRE t.c. p. 275.

Mandibularca **gen. n.**, *resinus* **sp. n.** Philippines, HERRE t.c. p. 273 pl. 1.

Rohtee roeboides **sp. n.** Burma, MYERS Amer. Mus. Novit. **150** p. 3.

Varicorhinus semireticulatus **sp. n.** Gaboon, PELLEGRIN Bull. soc. zool. France **49** p. 286 fig. 2.

Labeo horai p. 95 fig. 8, *henshawi* p. 98 fig. 9, **spp. n.** India, FOWLER t.c.

Discognathus baudoni figured, PELLEGRIN **308** p. 286 fig. 1.

Garra Indian vernacular names, HORA **166**.

COBITIDAE.

Notes on Indian spp., FOWLER **112**.

Nemacheilus carletoni **sp. n.** India, FOWLER, Proc. Acad. N. S. Philad. **76** p. 68 fig. 2; *N. sp.* Assam, HORA Rec. Ind. Mus. **26** p. 28 fig. 1.

Misgurnus fossilis intestinal respiration, ABOLIN **2**.

Cobitis fossilis in Denmark, OTTERSTRØM **291**; *C. taenia* variation in colour, FOWLER **114** p. 399 fig. 5.

SILUROIDEA.

Morphology and growth of fin-spines, REED **336**.

ARIIDAE.

Arius tuyra **sp. n.** Panama, MEEK & HILDEBRAND Field Mus. Pub. Zool. Ser. **15** No. 215 p. 128 pl. v.

SILURIDAE.

Of Philippines, Herre Philippine J. Sci. **24** p. 702.

Hito **gen. n.** p. 702, *taytayensis* **sp. n.** p. 703, HERRE t.c.

Penesilurus **gen. n.** p. 703, *palavanensis* **sp. n.** p. 704, HERRE t.c.

BAGRIDAE.

Chrysichthys börressoni **sp. n.** Lower Congo, LÖNNBERG t.c. p. 620.

Bagrus filamentosus **sp. n.** Niger, PELLEGRIN Bul. Mus. Paris **1924** p. 462; *B. lubosicus* **sp. n.** Lower Congo, LONNBERG Ann. Mag. N. H. (9) **14** p. 619.

AMIURIDAE.

Amiurus catus epidermis, COGNETTI DE MARTIIS **65**.

CLARIIDAE.

Of Philippines, HERRE **156**.

Saccobranchus fossilis liver, kidney, DUTTA **96**.

Clarias batrachus liver, kidney, DUTTA **96**.

MOCHOCIDAE.

Synodontis albolineatus **sp. n.** Gaboon, PELLEGRIN Bul. soc. zool. France **49** p. 320 fig.; *S. courteti*, PELLEGRIN **304**.

Atopochilus synopsis of spp. p. 489, *A. pachychilus* **sp. n.** Belgian Congo p. 487, PELLEGRIN Rev. Zool. Afric. **12**.

PIMELODIDAE.

Pteroglanis **gen. n.**, *manni* **sp. n.** Bolivia, Pearson Indiana Univ. Studies **11** (64) p. 9 pl. i fig. 1.

Nannorhamdia guttatus **sp. n.** Bolivia, PEARSON t.c. p. 11 pl. ii figs. 1–2.

Imparfinis bolivianus **sp. n.** Bolivia, PEARSON t.c. p. 12 pl. ii fig. 3.

Rhamdella rusbyi **sp. n.** Bolivia, PEARSON t.c. p. 12 pl. ii fig. 4.

CALLICHTHYIDAE.

Corydoras latus **sp. n.** Bolivia, PEARSON Indiana Univ. Stud. **11** (64) p. 20 pl. iii fig. 1.

LORICARIIDAE.

Plecostomus popoi p. 20 pl. iii figs. 2–3, *bolivianus* p. 21 pl. iv figs. 1–3, **spp. n.**, PEARSON Indiana Univ. Stud. **11** (64).

Rhinelepis levis **sp. n.** Bolivia, PEARSON t.c. p. 22 pl. v figs. 1–3.

Ancistrus megalostomus **sp. n.** Bolivia, PEARSON t.c. p. 23 pl. vi figs. 1–2.

Loricaria beni **sp. n.** Bolivia, PEARSON t.c. p. 25 pl. v fig. 4.

Farlowella acestrichthys **sp. n.** Bolivia, PEARSON t.c. p. 25 pl. viii fig. 2.

Astroblepus longiceps **sp. n.** Bolivia, PEARSON t.c. p. 15 pl. ii fig. 5.

INIOMI.

AULOPIDAE.

Hime **gen. n.** type *Aulopus japonicus*, STARKS Copeia **1924** p. 30.

SUDIDAE.

Bathypterois capensis **sp. n.** S. Africa, GILCHRIST & BONDE Rep. Fish. M. Biol. Survey S. A. **3** (VII) p. 8 pl. ii fig. 1.

Lestidium **gen. n.**, *nudum* **sp. n.** Hawaii, GILBERT Bul. U. S. Fish. Com. **23** 1905 p. 607 fig. 236.

MYCTOPHIDAE.

Photoblepharon palpebratus production of light, HARVEY **152**.

ALEPIDOSAURIDAE.

†*Apateodus corneti* skull descr. and fig., Cretaceous Holland, KRUIZINGA **210**.

Alepisaurus paronai **sp. n.** Miocene Italy, ERASMO Mem. Cart. Geol. Ital. **9** (II) p. 29 pl. iv fig. 1.

LYOMERI.

EURYPHARYNGIDAE.

Gastrostomus bairdii anatomy, NUSBAUM-HILAROWICZ **286**.

APODES.

Of Philippines, HERRE **154**.

ANGUILLIDAE.

Anguilla vulgaris distribution in Russia, BERG **26**; larvae, breeding, migrations, etc., CUNNINGHAM **74**, EICHELBAUM **100**, NORDQVIST & VALLIN **283**, J. SCHMIDT **363**, **364**; age and growth of elvers, EICHELBAUM **100**, NORDQVIST & VALLIN **283**, HORNYOLD **168-171**; sexual differentiation, ANCONA **11**; *A. borneensis* **sp. n.** Borneo, POPTA Zool. Meded. **8** p. 73 fig. 101.

HETERENCHELIDAE.

Panturichthys redescr., MONOD **264**.

MURAENIDAE.

Anarchias **gen. n.**, *allardicei* **sp. n.** Samoa, JORDAN & SEALE Bul. Bur. Fish. **25** 1906 p. 204 fig. 9.

NEMICHTHYIDAE.

Classification, specimens collected by the "Dana," ROULE & BERTIN Bul. Mus. Paris **1924** p. 61.

Avocettinops **gen. n.**, *schmidti* **sp. n.**, ROULE & BERTIN t.c. p. 63.

Platuronides **gen. n.**, *danae* **sp. n.**, ROULE & BERTIN t.c. p. 64.

Stemonidium **gen. n.**, *hypomelas* **sp. n.** Hawaii, GILBERT Bul. U. S. Fish. Com. **23** 1905 p. 586 pl. lxvii.

Nematoprora **gen. n.**, *polygonifera* **sp. n.**, GILBERT t.c. p. 587 fig. 234.

MURAENESOCIDAE.

†*Deprandus lestes* Miocene California, JORDAN **195** p. 49 pl. l.

CONGRIDAE.

Metopomycter **gen. n.**, *denticulatus* **sp. n.** Hawaii, GILBERT Bul. U. S. Fish. Com. **23** 1905 p. 585 fig. 233.

Gorgasia **gen. n.**, *punctata* **sp. n.** Panama, MEEK & HILDEBRAND Field Mus. Pub. Zool. Ser. **15** No. 215 p. 133 pl. vi.

OPHICHTHYIDAE.

Bascanichthys panamensis p. 151 pl. vii, *cylindricus* p. 152 pl. viii fig. 1, **spp. n.** Panama, MEEK & HILDEBRAND Field Mus. Pub. Zool. Ser. **15** No. 215.

Ophichthus chamensis **sp. n.** Panama, MEEK & HILDEBRAND t.c. p. 155 pl. viii fig. 2.

HETEROMI.

NOTACANTHIDAE.

Macdonaldia africana **sp. n.** S. Africa, GILCHRIST & BONDE Rep. Fish. M. Biol. Survey S. A. **3** (VII) p. 11 pl. iii fig. 1.

HAPLOMI.

ESOCIDAE.

Esox lucius pigment, etc., BECHER **24**; embryonic movements, KASANSKY **205**.

MICROCYPRINI.

CYPRINODONTIDAE.

Synopsis of genera of Fundulinae, AHL **7**.

Cyprinodon browni, JORDAN **190**.

Fundulichthys virescens is a young Cyprinid (? *Pseudorasbora parva*), MYERS **272**.

Fundulosoma **gen. n.** p. 52, *thierryi* **sp. n.** Dahomey p. 54, AHL Zool. Anz. **60**.

Panchax bualanus p. 54, *preussi*, *obscurus* p. 55, **spp. n.** Cameroon, AHL Zool. Anz. **60**; *P. carnapi*, *microstomus* p. 303, *escherichi* p. 304, *jaundensis* p. 305, *loboanus* p. 306, *elberti* p. 309, *tessmanni* p. 310, *bellicauda* p. 312 Cameroon; *chinchoxoanus* p. 305, *congicus* p. 307 Congo; *superbus* p. 306, *unicolor* p. 309 West Africa; *polychromus* p. 308 Gabon; *flavus* p. 311 Niger; **spp. n.**; AHL Zool. Anz. **60**.

Haplochilichthys ngaensis Cameroon p. 135; *stuhlmanni* p. 135, *bukobanus* p. 137, *fuelleborni* p. 138, Tanganyika Territory; *vitschumbaensis* p. 136, *pfefferi* p. 137, E. Congo; *kassenjiensis* L. Albert Edward p. 137; *kongoranensis* Congo (?), p. 139; AHL Zool. Anz. **61**; *H. atripinna* descr., AHL **7** p. 53.

Fundulus zimmeri p. 139, *rubrostictus* p. 140, *bitaeniatus* p. 141, Niger; *pappenheimi* p. 142, *riggenbachi* p. 142, *gustavi* p. 143, *beauforti* p. 144, Cameroon; **spp. n.**; AHL Zool. Anz. **61**.

Aphyosemion **gen. n.**, *castaneum* **sp. n.** Congo, MYERS Amer. Mus. Novit. **116** p. 2 figs. 1–2.

Fundulopanchax **subgen. n.** type *Fundulus gularis* var. *caerulea*, MYERS Amer. Mus. Novit. **116** p. 4.

Adiniops **subgen. n.** type *Fundulus guentheri*, MYERS Amer. Mus. Novit. **116** p. 6.

Nothobranchius vosseleri **sp. n.** Tanganyika Territory, AHL Zool. Anz. **61** p. 144.

Microphanchax **gen. n.** type *Haplochilus schoelleri*, MYERS Copeia **129** p. 41; *M. baudoni* **sp. n.** Ubanghi, MYERS Amer. Mus. Novit. **122** p. 1.

Haplochilus loemensis **sp. n.** Gaboon, PELLEGRIN Bul. soc. zool. France **49** p. 289 fig. 3; *H. platysternus* figured, MYERS Amer. Mus. Novit. **116** p. 7 fig. 4.

Hypsopanchax **gen. n.** type *Haplochilus platysternus*, MYERS Copeia **129** p. 41.

Leptolucania **subgen. n.** type *Heterandria ommata*, MYERS Amer. Mus. Novit. **116** p. 8.

Neofundulus **gen. n.** type *Fundulus paraguayensis*, MYERS Amer. Mus. Novit. **116** p. 9.

†*Parafundulus erdisi* **sp. n.** Miocene California, JORDAN Bul. S. Cal. Acad. Sci. **23** p. 45 pl. i.

Rivulus mazaruni **sp. n.** British Guiana, MYERS Amer. Mus. Novit. **129** p. 1; *R. rogoaguae* **sp. n.** Bolivia, PEARSON Indiana Univ. Stud. **11** (64) p. 51; *R. dorni* **sp. n.** Brazil, MYERS Ann. Mag. Nat. Hist. (9) **13** p. 588.

Cynolebias synopsis of spp. p. 359, *C. wolterstorffi* **sp. n.** S. Brazil, AHL Zool. Anz. **58**.

Goodea captiva **sp. n.** Mexico p. 4; *G. luitpoldi* p. 2, *atripinnis* p. 3, notes; HUBBS Occ. Pap. Mus. Zool. **148**.

Skiffia bilineata, lermae, HUBBS t.c. p. 8.

Gambusia holbrooki intromittent organ, ARTOM **16**; spermatogenesis, GEISER **127**; sex ratio, ARTOM **17**, GEISER **127**.

SYNENTOGNATHI.

HEMIRHAMPHIDAE.

Hemirhamphus quoyi (?) eggs, larvae, DELSMAN **82**.

Hyporhamphus unifasciatus p. 237 pl. xvi fig. 1, *roberti* p. 239 pl. xvi fig. 2, descr. and fig.; *H. gilli* p. 240 pl. xvii fig. 1, *snyderi* p. 240 pl. xvii fig. 2, **spp. n.** Panama; MEEK & HILDEBRAND Field Mus. Pub. Zool. Ser. **15** No. 215.

EXOCOETIDAE.

Exocoetus nomenclature, JORDAN **194**.

ANACANTHINI.

MACRURIDAE.

Of Irish Atlantic Slope, FARRAN **107**.

Bathygadus capensis **sp. n.** S. Africa, GILCHRIST & BONDE Rep. Fish. M. Biol. Survey **3** (VII) p. 13 pl. iii fig. 2.

GADIDAE.

Gadus aeglifinus biology, H. THOMPSON **400**; *G. merlangus* Pleistocene Germany, MUNTHE **267**.

Uraleptus maraldii larvae, SPARTA **384**.

ALLOTRIOGNATHI.

VELIFERIDAE.

Velifer hypselopterus skull figured, REGAN **337**.

STYLOPHORIDAE.

Stylophorus chordatus anatomy, systematic position, post-larva, REGAN **337**.

TRACHYPTERIDAE.

Agrostichthys **gen. n.** type *Regalecus parkeri*, PHILLIPPS Proc. Zool. Soc. **1924** p. 539 figs.

SOLENICHTHYES.

CENTRISCIDAE.

Amphisile form and function, BRUNELLI **47**.

MACRORHAMPHOSIDAE.

Macrorhamphosus elevatus, MCCULLOCH **244** p. 62 pl. xi fig. 1 text-figs. 1–4.

SYNGNATHIDAE.

Microphis annandalei **sp. n.** Siam, HORA Mem. Asiat. Soc. Bengal **6** p. 472 fig. 1.

Syngnathus tweedliei p. 259 pl. xviii fig. 1, *mindii* p. 261 pl. xviii fig. 2, **spp. n.** Panama ; *S. elcapitanense* p. 260 pl. xix descr. and fig. ; MEEK & HILDEBRAND Field Mus. Pub. Zool. Ser. **15** No. 215 ; *S. fuscus* devel. of skull, KINDRED **210.**

Hippocampus natalensis **sp. n.** Natal, BONDE Rep. Fish. M. Biol. Survey S. A. **3** (I) p. 9 pl. i fig. 1 ; *H. brevirostris* courtship, breeding habits, WEBER **413.**

BERYCOMORPHI.

ANOMALOPIDAE.

Anomalops katopron light production, HARVEY **152.**

MELAMPHAIDAE.

Plectromus coronatus **sp. n.** S. Africa, GILCHRIST & BONDE Rep. Fish. M. Biol. Survey S. A. **3** (VII) p. 14.

ZEOMORPHI.

ZEIDAE.

Zeus faber in Scottish waters, D. THOMPSON **399.**

Parazenopsis conchifer in Paris markets, PELLEGRIN & JUGEAT **311.**

Stethopristes **gen. n.**, *eos* **sp. n.** Hawaii, GILBERT Bul. U. S. Fish. Com. **23** 1905 p. 622 fig. 241.

Cyttus leptolepis **sp. n.** S. Africa, GILCHRIST & BONDE Rep. Fish. M. Biol. Survey S. A. **3** (VII) p. 17.

Paracyttopsis **gen. n.**, *scutatus* **sp. n.** S. Africa, GILCHRIST & BONDE t.c. p. 18 pl. v.

Cyttomimus **gen. n.** p. 623, *stelgis* **sp. n.** Hawaii p. 624, GILBERT t.c.

PERCOMORPHI.

PERCOIDEA.

SERRANIDAE.

Parasphenanthias = *Owstomia*, GILCHRIST & BONDE **134** p. 24.

Siniperca chua-tsi, SOWERBY **383.**

Caprodon affinis **sp. n.** Japan p. 611 pl. cxlviii fig. 408 ; *C. schlegeli* p. 607 pl. cxlix fig. 409 ; TANAKA Fish. Japan **33.**

Bryttosus kawamebari, TANAKA t.c. p. 618 pl. cl fig. 412.

Coreoperca herzi, TANAKA t.c. p. 623 pl. cl fig. 413.

Grammatonotus **gen. n.** p. 618, *laysanus* **sp. n.** Hawaii p. 619 fig. 240, GILBERT Bul. U. S. Fish. Com. **23** 1905.

Grammistes sexlineatus, TANAKA t.c. p. 626 pl. cl fig. 414.

CENTRARCHIDAE.

Micropterus salmoides acclimatised in France, CHEVEY **62.**

Apomotis cyanellus recorded from Canada, COX **72.**

Eupomotis auritus, COX **72.**

CHILODIPTERIDAE.

Amia ocellata **sp. n.** Natal, BONDE Rep. Fish. M. Biol. Survey S.A. **3** (I) p. 14 pl. i fig. 2.

Epigonus macrops **sp. n.** S. Africa, GILCHRIST & BONDE Rep. Fish. M. Biol. Survey S. A. **3** (VII) p. 14 pl. i fig. 3.

Hynnodus **gen. n.**, *atherinoides* **sp. n.** Hawaii, GILBERT Bul. U. S. Fish. Com. **23** 1905 p. 618 pl. 79.

Foa **gen. n.** type *Fowleria brachygrammus*, JORDAN & EVERMANN Bul. U. S. Fish. Com. **23** (I) 1905 p. 210.

PERCIDAE.

Perca fluviatilis hepatic-vitelline connection in embryo, CHEVEY **61.**

Lucioperca sandra rate of growth, FREIDENFELT **119.**

Etheostoma fricksia **sp. n.** Georgia, HILDEBRAND Bul. Bur. Fish. **39** p. 7 fig. 1.

LATILIDAE.

Latilus tollardi **sp. n.** Annam, CHABANAUD Bul. Mus. Paris **1924** p. 357.

Oceanops **gen. n.** type *Malacanthus latovittatus*, JORDAN & SEALE Bul. Bur. Fish. **25** 1906 p. 277.

POMATOMIDAE.

Temnodon isseli **sp. n.** Pliocene Italy, SANTUCCI Bull. Soc. geol. ital. **41** p. 204 pl. iii figs. 2, 2a.

CARANGIDAE.

Of Japan, WAKIYA Ann. Carnegie Mus. **15** pp. 139–244 pls. xv–xxxviii; synopsis of Australian genera and spp., MCCULLOCH Mem. Queensland Mus. **8** p. 67.

Trachurus argenteus **sp. n.** Japan, WAKIYA t.c. p. 145.

Decapterus dayi **sp. n.** Indo-Pacific, WAKIYA t.c. p. 158 pl. xviii fig. 1.

Caranx (*Citula*) *uii* p. 174 pl. xxii fig. 1, *tanakai* p. 177 pl. xxiii fig. 1, **spp. n.** Japan; *C.* (*Citula*) *schlegeli* **nom. n.** = *C. ciliaris* Cuv. & Val. *nec.* Rüppell p. 170 pl. xx fig. 2; *C.* (*Caranx*) *oshimai* Indo-Pacific p. 189 pl. xxvii fig. 1, *ishikawai* Formosa p. 193 pl. xxvi, **spp. n.**; *C.* (*Atule*) *miyakamii* **sp. n.** Formosa p. 201 pl. xxix fig. 4; WAKIYA t.c.: *C. papuensis* p. 69 pl. xiii, *melampygus* p. 70 pl. xi fig. 2, *leptolepis* p. 72 text-figs., *laticaudis* p. 74 pl. xii, descr. and fig.; MCCULLOCH t.c.

Ulua mandibularis, MCCULLOCH t.c. p. 75 pl. xiv.

Longirostrum **nom. n.** for *Selenia* praeocc., WAKIYA t.c. p. 202.

Alectis temmincki p. 215, *breviventralis* p. 216 pl. xxxiii, **spp. n.** Japanese Seas, WAKIYA t.c.

Trachynotus cuvieri p. 220, *jordani* p. 221 pl. xxxv fig. 1, **spp. n.** Japanese Seas, WAKIYA t.c.

Seriolina **gen. n.** type *Seriola intermedia*, WAKIYA t.c. p. 230.

Scomberoides formosanus **sp. n.** Formosa, WAKIYA t.c. p. 236 pl. xxxviii fig. 3.

BRAMIDAE.

Brama raii on coast of Brittany, LEGENDRE **230**; from New Zealand, PHILLIPPS **322**.

ERYTHRICHTHYIDAE.

Synopsis of genera and species, CHABANAUD Bul. soc. zool. France **49** p. 252.

Dipterygonotus gruveli **sp. n.** Indo-China, CHABANAUD Bul. Mus. Paris **1924** p. 57; Bul. soc. zool. **49** p. 248.

LUTIANIDAE.

Clupeolabrus dubius = *Caesio tile*, REGAN **339**.

†*Lompoquia retropes* Miocene California, JORDAN **195** p. 47 pl. K.

SCIAENIDAE.

Life histories of American (Atlantic Coast) spp., WELSH & BREDER **416**.

Sciaena siamensis **sp. n.** Siam, HORA Mem. Asiat. Soc. Bengal **6** p. 487 fig. 4.

Umbrina fuscolineata **sp. n.** Natal, BONDE Rep. Fish. M. Biol. Survey S. A. **3** (I) p. 15 pl. iv.

Micropogon undulatus hermaphrodite, BREDER **41**.

SPARIDAE.

Dentex weinheimensis p. 112 pl. i figs. 23, 25, pl. ii figs. 1, 2, *gracilis* p. 113 pl. iii figs. 13, 14, **spp. n.** Tertiary Germany, WEILER Abh. geol. Land. Darmstadt **6**; *D. pliocenicus* **sp. n.** Pliocene Italy, SANTUCCI Boll. Soc. geol. ital. **41** p. 207 pl. iii figs. 5, 5a.

Pagellus bonomoi **sp. n.** Oligocene Italy, FRANCESCHI Paleontgr. Ital. **28** p. 79 pl. xiv (I) fig. 5.

Pagrus ciliaris **sp. n.** Natal, BONDE Rep. Fish. M. Biol. Survey S. A. **3** (I) p. 19 pl. v.

Chrysophrys aurata pseudobranchiae, GRANEL **136**.

†*Eriquius* **gen. n.**, *plectrodes* **sp. n.** Miocene California, JORDAN Bul. S. Cal. Acad. Sci. **23** p. 44 pl. H.

PEMPHERIDAE.

Parapempheris **gen. n.**, *argenteus* **sp. n.** Natal, BONDE Rep. Fish. M. Biol. Survey S. A. **3** (I) p. 11 pl. ii fig. 2.

KYPHOSIDAE.

Gregoryina **gen. n.**, *gygis* **sp. n.** Hawaiian Isds., FOWLER & BALL Proc. Acad. N. S. Philad. **76** p. 270.

SCATOPHAGIDAE.

Scatophagus argus young, HORA **165**.

CHAETODONTIDAE.

Vinculum sexfasciatum from Tasmania, LORD **240**.

HOPLEGNATHIDAE.

Oplegnathus manni **sp. n.** Tertiary Australia, CHAPMAN & CUDMORE Proc. R. Soc. Vict. **36** p. 145 pl. xi figs. 44, 45.

CICHLIDAE.

Etroplus suratensis breeding habits, PANIKKAR **294.**

Tilapia chungruruensis **sp. n.** Tanganyika Territory, AHL Zool. Anz. **59** p. 86 ; *T. calciati* **sp. n.** Eritrea, GIANFERRARI Atti Soc. ital. sc. nat. **63** p. 242 fig.

HAPLODACTYLIDAE.

Dactylosargus arctidens descr. and fig., WAITE **411** p. 480 pl. xxix text-fig. 379.

POMACENTRIDAE.

Eupomacentrus beebi **sp. n.** Galapagos Is., NICHOLS Zoologica **5** p. 64.

Plectroglyphidodon **gen. n.**, *johnstonianus* **sp. n.** Hawaiian Isds., FOWLER & BALL Proc. Acad. N. S. Philad. **76** p. 271.

LABRIDAE.

Labrodon batesfordiensis **sp. n.** Tertiary Australia, CHAPMAN & CUDMORE Proc. R. Soc. Vict. **36** p. 143 pl. xi figs. 41, 42 ; *L. roveretoi* **sp. n.** Pliocene Italy, SANTUCCI Boll. Soc. geol. ital. **41** 1923 p. 210 pl. iii figs. 10, 10a.

OPISTHOGNATHIDAE.

Gnathypops samoensis **sp. n.** Samoa, FOWLER & SILVESTER Papers Dept. M. Biol. Carnegie Inst. **18** p. 118 fig. 1.

BEMBROPSIDAE.

Chrionema **gen. n.** p. 645, *chryseres* p. 645 pl. 85, *squamiceps* p. 646 pl. 86, **spp. n.** Hawaii, GILBERT Bul. U. S. Fish. Com. **23** 1905.

BOVICHTHYIDAE.

Pseudaphritis urvillii, WAITE **411** p. 482 pl. xxx fig. 1.

MUGILOIDEA.

SPHYRAENIDAE.

Sphyraena natalensis **sp. n.** Natal, BONDE Rep. Fish. M. Biol. Survey S. A. **3** (I) p. 10 pl. iii fig. 2.

ATHERINIDAE.

Menidia uruguayensis **sp. n.** Uruguay, DEVINCENZI An. Mus. Montevideo (2) **5** p. 205 pl. xiv fig. 4 ; *M. starksi* **sp. n.** Panama p. 267 pl. xx fig. 2, *M. chagresi* descr. and fig. p. 266 pl. xx fig. 1, MEEK & HILDEBRAND Field Mus. Pub. Zool. Ser. **15** No. 215.

Kirtlandia beani **sp. n.** Panama, MEEK & HILDEBRAND t.c. p. 270 pl. xxi.

Mugilops **gen. n.**, *cyanellus* p. 271 pl. xxii fig. 1, *marinus* p. 272 pl. xxii fig. 2, **spp. n.** Panama, MEEK & HILDEBRAND t.c.

Rhadinocentrus ornatus, MESSMER **262.**

ANABANTOIDEA.

Of Philippines, HERRE **156.**

ANABANTIDAE.

Trichogaster trichopterus, HERRE **156** p. 692 pl. i.

OPHIOCEPHALIDAE.

Accessory respiratory organs, SENNA **373.**

Parophiocephalus **subgen. n.** for *Ophiocephalus obscurus*, *africanus*, *insignis*, SENNA Monit. Zool. ital. **35** p. 156.

STROMATEOIDEA.

STROMATEIDAE.

Of South Africa, GILCHRIST & BONDE Rep. Fish. M. Biol. Survey S. A. **3** (IV) p. 2.

Centrolophodes **gen. n.**, *irvini* **sp. n.** S. Africa, GILCHRIST & BONDE t.c. p. 3 pl. xvii fig. 1.

Cubiceps natalensis **sp. n.** Natal, GILCHRIST & BONDE t.c. p. 7 pl. xvii fig. 2.

Psenes africanus **sp. n.** S. Africa, GILCHRIST & BONDE t.c. p. 8 pl. xviii fig. 1.

Lirus maculatus descr. and fig., GILCHRIST & BONDE t.c. p. 9 pl. xvii fig. 2.

Stromateus capensis p. 11, *microchirus* p. 11 pl. xix, GILCHRIST & BONDE t.c.

TRICHIUROIDEA.

GEMPYLIDAE.

Ruvettus delagoensis **sp. n.** S. Africa, GILCHRIST & BONDE Rep. Fish. M. Biol. Survey S. A. **3** (VII) p. 16.

SCOMBROIDEA.

SCOMBRIDAE.

Larvae and young from Mediterranean, etc. (*Scomber, Pelamis, Orcynus, Euthynnus, Auxis, Scomberomorus*), EHRENBAUM Rep. Danish Ocean. Exp. **2** (Biol.) A 11 42 pp. 10 figs. ; Tunnies of Greece, ATHANASSOPOULOS **19.**

Scomber scombrus larvae and young, EHRENBAUM **98** ; *S. scombrus, colias*, migrations in Black Sea, GALTSOFF **126.**

Epinnula orientalis **sp. n.** S. Africa, GILCHRIST & BONDE Rep. Fish. M. Biol. Survey S. A. **3** (VII) p. 15 pl. iv fig. 1.

Sarda velox **sp. n.** Panama, MEEK & HILDEBRAND Field Mus. Pub. Zool. Ser. **15** No. 215 p. 320 pl. xiv.

Thynnus pliocenicus **sp. n.** Pliocene Italy, SANTUCCI Boll. Soc. geol. ital. **41** p. 204 pl. iii figs. 4, 4a, 4b, 4c.

Orcynus thynnus migrations, O. DE BUEN **53** ; *O. thynnus, alalonga* young, SELLA **370.**

Auxis bisus young, SELLA **370.**

LUVARIDAE.

Luvarus imperialis larvae and young ; metamorphosis phases (*Hystricinella, Astrodermella, Luvarella*) ; ROULE Bul. soc. zool. **49** p. 102 figs.

XIPHIIDAE.

Xiphias gladius recorded from Nice, ISNARD **184** ; young figured, REGAN **339.**

Phaethonichthys tuberculatus = young *Xiphias gladius*, REGAN **339.**

SIGANOIDEA.

SIGANIDAE.

Lo **gen. n.** type *Amphacanthus vulpinus*, JORDAN & SEALE Bul. Bur. Fish. **25** 1906 p. 360.

GOBIOIDEA.

ELEOTRIDAE.

Eleotris synopsis of Chinese spp., RENDAHL **346** p. 10.

Trimma **gen. n.**, *caesiura* **sp. n.** Samoa, JORDAN & SEALE Bul. Bur. Fish. **25** 1906 p. 391 fig. 83.

Vitreola **gen. n.**, *sagitta* **sp. n.** Samoa, JORDAN & SEALE t.c. p. 393 pl. xxxvii fig. 1.

GOBIIDAE.

Of China, RENDAHL Ark. Zool. **16** No. 2 pp. 8–31.

Gobius of Spain and Balearic Islands monographed ; *G. minutus lozanoi* **subsp. n.** Spain p. 221 figs. 51–52 ; *G. fagei* **nom. n.** = *G. knerii* and *G. elongatus* Fage *nec* Steindachner and Canestrini p. 233 ; BUEN Mem. Inst. Españ. Ocean. **3** : synopsis of Chinese spp. p. 13 ; *G.* (*Cryptocentrus*) *pretiosus* p. 16, *G. petschiliensis* p. 20, *cryptosquamis* p. 24, **spp. n.** China ; RENDAHL t.c. : *G. bibarbatus* **sp. n.** S. Africa, BONDE Rep. Fish. M. Biol. Survey S.A. **3** (I) p. 28 pl. vi.

Kelloggella **gen. n.** type *K. cardinalis* JORDAN & EVERMANN Bull. U. S. Fish. Com. **23** (I) 1905 p. 488.

Vaimosa **gen. n.**, *fontinalis* **sp. n.** Samoa, JORDAN & SEALE Bul. Bur. Fish. **25** 1906 p. 395 fig. 85.

Vailima **gen. n.**, *stevensoni* **sp. n.** Samoa, JORDAN & SEALE t.c. p. 398 fig. 87.

Drombus **gen. n.**, *tutuilae* **sp. n.** Samoa, JORDAN & SEALE t.c. p. 399 fig. 88.

Exyrias **gen. n.** type *Gobius puntangoides*, JORDAN & SEALE t.c. p. 405.

Pselaphias **gen. n.** type *Gobius ophthalmonemus*, JORDAN & SEALE t.c. p. 406.

Waitea **gen. n.** type *Gobius mystacina*, JORDAN & SEALE t.c. p. 407.

Mars **gen. n.**, *strigilliceps* **sp. n.** Samoa, JORDAN & SEALE t.c. p. 408 fig. 95.

Triaenopogon japonicus **sp. n.** Japan, RENDAHL t.c. p. 27.

Benthophilus macrocephalus from Donau R., DRENSKY **92.**

Taenioididae new family proposed for Gobioidinae and Trypaucheninae, HORA **163** p. 157.

Taenioides nigrimarginatus **sp. n.** Siam, HORA Mem. Asiat. Soc. Bengal **6** p. 496 fig. 8 ; *T. petschiliensis* **sp. n.** (?) China, RENDAHL t.c. p. 31.

Trypauchen, *Trypauchenichthys*, *Ctenotrypauchen* revision, HORA **163** p. 157.

Amblyotrypauchen **gen. n.**, *fraseri* **sp. n.** Bay of Bengal, HORA Rec. Ind. Mus. **26** p. 160 figs. 3–4.

BLENNIOIDEA.

Blenniidae.

Blennius testis, Champy **59**; *B. rhabdotrachelus* **sp. n.** Hawaiian Isds., Fowler & Ball Proc. Acad. N. S. Philadelphia **76** p. 272.

Rupiscartes quagga **sp. n.** Hawaiian Isds., Fowler & Ball t.c. p. 273.

Salarias sexfasciatus **sp. n.** Natal, Bonde Rep. Fish. M. Biol. Survey S. A. **3** (I) p. 34 pl. iii fig. 1.

Petroscirtes annamensis **sp. n.** (?) Annam, Chabanaud Bul. Mus. Paris **1924** p. 363.

Runula albolinea **sp. n.** Galapagos Is., Nichols Zoologica **5** p. 64 fig. 11.

Clinidae.

Sauvagea **nom. n.** for *Lepidoblennius* praeocc., Jordan & Seale Bul. Bur. Fish. **25** 1906 p. 420.

Ophioclinus gracilis, Waite **411**.

Brotulidae.

Diplacanthopoma nigripinnis **sp. n.** S. Africa, Gilchrist & Bonde Rep. Fish. M. Biol. Survey S. A. **3** (VII) p. 20 pl. iv fig. 2.

Snyderidia **gen. n.** p. 654, *canina* **sp. n.** Hawaii p. 655 pl. 92, Gilbert Bull. U. S. Fish. Com. **23** 1905.

Brosmophycis marginatus from Southern California, W. Thompson **401**.

Fierasferidae.

Jordanicus **gen. n.** type *Fierasfer umbratilis*, Gilbert Bul. U. S. Fish. Com. **23** 1905 p. 656.

SCLEROPAREI.

Scorpaenidae.

Scorpaena russula atlantica **subsp. n.** Gulf of Mexico, Nichols & Breder Proc. Biol. Soc. Washington **37** p. 21 pl. vii; *S. capensis* **sp. n.** S. Africa, Gilchrist & Bonde Rep. Fish. M. Biol. Survey S. A. **3** (VII) p. 18; *S. nuttingi* **sp. n.** Barbados, Evermann & Seale Univ. Iowa Stud. N. H. **10** p. 39 pl. i.

Scorpaenopsis marmoratus **sp.n.** Natal, Bonde Rep. Fish. M. Biol. Survey S. A. **3** (I) p. 30 pl. vii.

Sebastodes gunnari **sp. n.** China, Rendahl Ark. Zool. **16** No. 2 p. 32.

Pterois natalensis **sp. n.** Natal, Bonde t.c. p. 32 pl. viii.

Pelorops **gen. n.**, *xenops* **sp. n.** Hawaii, Gilbert Bul. U. S. Fish. Com. **23** 1905 p. 630 fig. 245.

Plectrogenium **gen. n.**, *nanum* **sp. n.** Hawaii, Gilbert t.c. p. 634 fig. 248.

Triglidae.

Trigla gurnardus, *hirundo* in North Sea, Hertling **158**; *T. lucerna* luminescence, Dubois **93**.

Prionotus miles pectoralis **subsp. n.** Gulf of Mexico p. 22; *P. punctatus*, *beani* notes p. 23; Nichols & Breder Proc. Biol. Soc. Washington **37**.

Bembradium **gen. n.**, *roseum* **sp. n.** Hawaii, Gilbert Bul. U. S. Fish. Com. **23** 1905 p. 637 pl. 82.

Pataecidae.

Gnathanacanthus goetzeei, Waite **411** p. 484 pl. xxxi.

Cottidae.

Cottus meridionalis nesting habits, B. Smith **378**; *C. beldingi* Miocene Nevada, Jordan **189**.

Myoxocephalus quadricornis distribution, Berg **27**.

Trachydermus fasciatus, Tanaka **394** p. 613 pl. cxlix figs. 410–411.

Gasterosteidae.

Gasterosteus pungitius testis and secondary sexual characters, Oordt **288**.

HETEROSOMATA.

Ambicoloration, albinism, etc., Schnakenbeck **367**.

Bothidae.

Taeniopsetta **gen. n.**, *radula* **sp. n.** Hawaii, Gilbert Bul. U. S. Fish. Com. **23** 1905 p. 680 fig. 266.

Pleuronectidae.

Hippoglossus antiquus **sp. n.** Miocene California, Jordan Bul. S. Cal. Acad. Sci. **23** p. 43 pl. G.

Reinhardtius hippoglossoides from off S. W. of Ireland, Norman **284**.

Pleuronectes limanda growth of egg, WHEELER **417**; *P. platessa* spawning in North Sea, BUCHANAN-WOLLASTON **49**; *P. pinnifasciatus* ambicolorate, P. SCHMIDT **365**.

Samariscus **gen. n.**, *corallinus* **sp. n.** Hawaii, GILBERT Bul. U. S. Fish. Com. **23** 1905 p. 682 pl. 96.

Rhombosolea millari ambicolorate, ARCHEY **15**.

SOLEIDAE.

Solea vulgaris age and growth, THIELEMANN **397**.

PLECTOGNATHI.

Of Philippines, HERRE **157**.

BALISTIDAE.

Balistes humilis **sp. n.** Philippines, HERRE Philippine J. Sci. **25** p. 434.

Verrunculus **subgen. n.** type *Balistes polylepis*, JORDAN Copeia **1924** p. 82.

OSTRACIONTIDAE.

Lactoria fuscomaculata **sp. n.** Natal, BONDE Rep. Fish. M. Biol. Survey S. A. **3** (I) p. 38 pl. ix fig. 1.

Aracana kershawi **sp. n.** Tertiary Australia, CHAPMAN & CUDMORE Proc. R. Soc. Vict. **36** p. 147 pl. xi fig. 46.

TETRODONTIDAE.

Tetrodon palembangensis, *liuris* figured, HORA **165**.

Spheroides unifasciatus p. 39 pl. ii fig. 1, *dubius* p. 40 pl. ii fig. 3, **spp. n.** Natal, BONDE Rep. Fish. M. Biol. Survey S. A. **3** (I); *S. pleurogramma*, WAITE **411**; *S. maculatus* life-history, eggs, larvae and young, WELSH & BREDER Zoologica **2** p. 261 figs.

Kanduka **gen. n.**, *michiei* **sp. n.** Bengal, HORA Rec. Ind. Mus. **26** p. 579 pl. xxxiv.

DIODONTIDAE.

Chilomycterus parcomaculatus **sp. n.** Natal, BONDE Rep. Fish. M. Biol. Survey S. A. **3** (I) p. 38 pl. ix fig. 2.

MOLIDAE.

Orthagoriscus mola from Naples, specimens from Italian waters, notes on related species, PATRONI **296**.

PEDICULATI.

BATRACHOIDIDAE.

Thalassophyrne platensis **sp. n.** Uruguay, DENINCENZI An. Mus. Montevideo (2) **5** p. 260 pl. xx fig. 1.

Bathybatrachus **gen. n.**, *albolineatus* **sp. n.** S. Africa, GILCHRIST & BONDE Rep. Fish. M. Biol. Survey S. A. **3** (VII) p. 21 pl. vi fig. 1.

Histiophyrne bougainvilli, WAITE **411**.

Porichthys notatus production of sound, GREENE **139**; gases of air bladder, GREENE **138**, **140**; phosphorescence, GREENE **141**.

CERATIIDAE.

Miopsaras **gen. n.**, *myops* **sp. n.** Hawaii, GILBERT Bul. U. S. Fish. Com. **23** 1905 p. 694 pl. 99.

Oneirodes cornutus **sp. n.** S. Africa, GILCHRIST & BONDE Rep. Fish. M. Biol. Survey S. A. **3** (VII) p. 23 pl. vi fig. 2.

OPISTHOMI.

MASTACEMBELIDAE.

Mastacembelus circumcinctus **sp. n.** Siam p. 475 fig. 3; *M. armatus favus* **var. n.** Siam p. 474 fig. 2; HORA Mem. Asiat. Soc. Bengal **6**.

CLADISTIA.

Polypterus myology of pectoral region, SHANN **376**; *P. delhesi* devel. of dorsal fin, SEWERTZOFF **374**.

DIPNEUSTI.

Ceratodus palaeoruncinatus **sp. n.** Triassic Germany, FRENTZEN Centralbl. Min. **1924** p. 216 fig.

Lepidosiren myology of pectoral region, SHANN **376**.

OSTRACODERMI.

†*Bothriolepis traquairi* **sp. n.** Devonian Canada p. 54 pl. i; *B. canadensis* figured pl. ii; BRYANT Bul. Buffalo Soc. N. S. **13**.

†*Pteraspis* from Devonian Belgium, LERICHE **234**.

XIV. REPTILIA AND BATRACHIA

ARRANGED BY

JOAN B. PROCTER, F.Z.S., F.L.S.

CONTENTS.

	PAGE
I. TITLES	2
II. SUBJECT INDEX	26
III. SYSTEMATIC :—	
Reptilia	30
Batrachia	38

I.—TITLES.

1.—Abderhalden, E. Fortgesetzte Studien über die Beeinflussung der Entwicklung von Kaulquappen durch Uerbindungen mit bekannter Struktur. Arch. ges. Physiol. Berlin **206** 1924 pp. 467–472 3 figs.

2.—Abe, S. Zur Kenntnis der Entwickelung der Darmepithels der Larve von *Bufo vulgaris.* Aichi. J. Exper. med. Nagoya Japan **1** no. 3 pp. 87–97 1 pl.

3.—Abel, O. Die neuen Dinosaurierfunde in der Oberkreide Canadas. Naturwissen. Berlin **12** 1924 pp. 709–716 text-figs. 1–12.

4.—Adams, A. E. An experimental study of the mouth region in the amphibian embryo. Anat. Rec. Philadelphia **27** 1924 p. 193.

5.—Adams, A. E. An experimental study of the development of the mouth in the amphibian embryo. J. Exp. Zool. Philadelphia **40** 1924 pp. 311–380 7 plates.

6.—Ahl, E. Zur Kenntnis der Froschfauna Afrikas. Zool. Anz. Leipzig **58** 1924 pp. 81–82.

7.—Ahl, E. Über einige afrikanische Frösche. Zool. Anz. Leipzig **60** 1924 pp. 269–273.

8.—Ahl, E. Neue afrikanische Frösche. Zool. Anz. Leipzig **61** 1924 pp. 99–103.

9.—Ahl, E. Über eine Froschsammlung aus Nordost-Afrika und Arabien. Mitt. Zool. Mus. Berlin 11 **1** H 1924 pp. 1–12.

10.—Ahl, E. Neue Reptilien und Batrachier aus dem Zoologischen Museum. Arch. Natg. Berlin Abt. A **90** (5) pp. 246–254.

11.—Alberti, W. et **Politzer,** G. Ueber den Einfluss der Röntgenstrahlen auf die Zellteilung. Part 2. Arch. Mikr. Anat. Entwickl. Berlin **103** 1924 pp. 284–307 27 figs.

Alfonsi, N. *vide* Aron and Alfonsi.

12.—Alluaud, C. Verbal report on Pleurodeles in Morocco. Bul. soc. sci. nat. Maroc. Rabat **1923** p. 89.

13.—Almeida, M. O. de. Sur le rôle de la peau dans la coordination des mouvements et dans le sens des attitudes. C.R. soc. biol. Paris **91** 1924 pp. 878–880.

14.—Almeida, M. O. de., et **Fialho,** B. de A. Sur les effets des ablations partielles et totales de la peau chez les Serpents. C.R. soc. biol. Paris **91** 1924 pp. 880–882.

15.—Altmann, F. Untersuchungen über die Torsio femoris und damit im Zusammenhang stehenden Fragen. Zs. ges. Anat. München **75** 1924 pp. 82–126 27 figs.

16.—Amalitzky, V. P. Diagnoses of the new forms of Vertebrates and Plants from the Upper Permian on North Dvina. Bull. Acad. Sci. Russ. Petrograd **1922** (1924) pp. 329–340 14 figs.

17.—Amalitzky, V. P. On the *Dvinosauridae,* a family of Labyrinthodonts from the Permian of North Russia. Ann. Mag. Nat. Hist. London ser. 9 **13** 1924 pp. 50–64 pl. i.

18.—Amalitzky, V. P. On a new Colytosauria of the Family *Seymouridae* from the Permian of North Russia. Ann. Mag. Nat. Hist. London ser. 9 **13** 1924 pp. 64–77.

19.—Amaral, A. do. On the biological differentiation of the neotropical species of Snakes, *Bothrops atrox* (Linné, 1758), *B. jararaca* (Wied, 1824) and *B. jararacussu* Lacerda, 1884. Amer. J. Tropical Med. Baltimore **4** 1924 pp. 447–452.

20.—Amaral, A. do. Notes on some Central American Snakes. Occ. Pprs. Boston soc. Nat. Hist. **5** 1924 pp. 129–132.

21.—Amaral, A. do. New genus and species of South American Snakes contained in the United States National Museum. J. Washington Acad. Sci. **14** 1924 pp. 200–202.

22.—Amaral, A. do. *Helminthophis.* Proc. N. Eng. zool. Club Cambridge (U.S.A.) **9** 1924 pp. 25–30.

23.—Ancel, P. et **Vintemberger,** P. Action accélératrice des rayons X sur le développement embryonnaire. C.R. Soc. biol. Paris **91** 1924 pp. 606–609.

24.—Ancel, P. et **Vintemberger,** P. De l'action des rayons X sur la segmentation et la gastrulation chez *Rana fusca.* C.R. soc. biol. Paris **91** 1924 pp. 1267–1270.

Anderson, L. A. P. *vide* Caius, Izengar and Anderson.

25.—Andersson, L. G. Some Reptiles and Batrachians from Central-Borneo. Nyt Mag. Nat. Kristiania **61** 1924 pp. 119–125.

26.—Andrews, C. W. Notes on some Ophidian vertebrae from Nigeria. Bul. Geol. Surv. Nigeria **7** Appendix 1924 pp. 39–43 figs. 1–2.

27.—Andrews, C. W. Note on an Icthyosaurian paddle showing traces of soft tissues. Proc. Zool. Soc. London **1924** pp. 533–540 pl. 1 text-figs. 1–2.

28.—Angel, F. Notes herpétologiques. Bul. Soc. Zool. France Paris **47** 1922 pp. 257–259.

29.—Angel, F. Extrait de la Mission Rohan-Chabot Angola et Rhodesia 1912–1914. Reptiles **4** (1) Paris (Imprimerie nationale) 1923 pp. 157–169 text-figs. 1–12 1 pl.

30.—Angel, F. Description d'un Lézard nouveau d'Afrique Orientale, appartenant au genre *Ablepharus* [Mission Alluaud 1903–1904]. Bull. Mus. Hist. Nat. Paris **1924** pp. 52–53.

31.—Angel, F. Description de deux Batraciens nouveaux, d'Afrique Orientale anglaise, appartenant au genre *Phrynobatrachus* [Mission Alluaud et Jeannel 1911–1912]. Bull. Mus. Hist. Nat. Paris **1924** pp. 130–131.

32.—Angel, F. Note préliminaire sur deux Batraciens nouveaux, des genres *Rappia* et *Bufo,* provenant d'Afrique Orientale anglaise (Mission Alluaud et Jeannel, 1911–1912). Bull. Mus. Hist. Nat. Paris 1924 pp. 269–270.

33.—Aron, M. Recherches morphologiques et expérimentales sur le déterminisme des caractères sexuels mâles chez les Urodèles. Arch. biol. Liège-Paris **34** 1924 pp. 1–166.

34.—Aron, M. Cycle séminal, cycle interstitiel, et caractères sexuel secondaires chez *Rana esculenta* et *R. temporaria.* C.R. soc. biol. Paris **90** 1924 pp. 797–805.

35.—Aron, M. A propos des caractères sexuels des Anoures. C.R. soc. biol. Paris **90** 1924 pp. 1207–1212 text-figs. 1–8.

36.—Aron, M. et **Alfonsi,** N. Recherches sur l'Histogénèse et la Physiogénèse comparées des Îlots pancréatiques endocrines des Batraciens. C.R. soc. biol. Paris **91** 1924 pp. 609–612.

37.—Arthaber, G. von. Die Phylogenie der Nothosaurier. Act. zool. Stockholm **5** 1924 pp. 439–516 35 figs.

38.—Athanasiu, I. Sur l'energie nerveuse motrice. (Réponse à S. Cooper et E.-D. Adrian.) C.R. soc. biol. Paris **91** 1924 pp. 724–727.

39.—Avel, M. Sur l'appareil de Golgi du rein de la Grenouille rousse et du Triton alpestre. C.R. soc. biol. Paris **90** 1924 pp. 794–796.

40.—Avel, M. Sur l'appareil de Golgi des hématies de Grenouille. C.R. soc. biol. Paris **90** 1924 pp. 792–794 text-fig. 1.

Bakker, A. *vide* Haan and Bakker.

41.—Ballowitz, E. Zur Kenntnis der Cephalopodenspermien nebst einigen Bemerkungen über spiralig geformte Samenkörper. Anat. Anz. Jena **58** 1924 pp. 278–286 6 figs. (Batrachia p. 285).

42.—Barbour, T. The Frogs of the Fiji Islands. Proc. Ac. Nat. Sci. Philadelphia **75** 1923 pp. 111–115.

43.—Barbour, T. A Record Crocodile, *Crocodilus porosus.* Singapore Nat. **1924** (4) p. 88.

44.—Barbour, T. A new *Gymnophis* from Colombia. Proc. Biol. Soc. Washington **37** 1924 pp. 125–126.

45.—Barbour, T. A Yunnan Gecko. Occ. Paps. Soc. Nat. Hist. Boston **5** 1924 pp. 133–135 3 figs.

46.—Barrett, C. Reptile Life in Australia. Nat. Hist. New York **24** 1924 pp. 42–59. Photos living specimens.

47.—Barthélemy, H. et Bonnet, M. Influence de la température sur l'utilisation de l'énergie au cours du développement de l'oeuf de grenouille rousse (*Rana fusca*). C.R. Acad. sci. Paris **178** 1924 pp. 2005–2006.

48.—Bau, K. T. Ueber den feineren Bau des Ganglion prooticum des Frosches. Anat. Anz. Jena **57** 1924 pp. 193–205 12 figs.

49.—Baylis, H. A. Some considerations on the Host-Distribution of Parasitic Nematodes. J. Linn. Soc. London (Zoology) **36** 1924 pp. 13–23.

50.—Baylis, H. A. A new species of Physaloptera [*Nematoda*] from an Australian Lizard. Ann. Mag. Nat. Hist. London ser. 9 **13** 1924 pp. 309–311.

51.—Baylis, H. A. et Cannon, H. G. A new Trematode from the Grass-snake. Ann. Mag. Nat. Hist. London ser. 9 **13** 1924 pp. 194–196, 558–559, pl. 6.

52.—Beadon, W. R. C. Python and Monitor. J. Bombay Nat. Hist. Soc. **30** 1924 pp. 229–230.

53.—Beccari, N. Studi sulla prima origine delle cellule genitali nei vertebrati. 3. Ricerche nel *Bufo viridis*. Arch. ital. anat. embr. Firenze **21** 1924 pp. 332–374 3 plates and 11 figs.

54.—Beebe, W. Galápagos: World's End. New York & London **1924** pp. xxi + 1–433 coloured pls. 1–8 figs. & photos 1–82.

Belehradek, J. *vide* Bouchaert, J. P.

55.—Bellamy, A. W. et Child, C. M. Susceptibility in Amphibian Development. Proc. R. Soc. London **B 96** 1924 pp. 132–145.

56.—Bergauer, V. Einige Beobachtungen über den Stereotropismus der Kaulquappen. Arch. mikr. Anat. Entw. Berlin **101** 1924 pp. 528–540 4 figs.

57.—Bertin, L. Revue de Zoologie (Reptiles et Batrachiens). Rev. gén. sci. Paris **35** 1924 pp. 73–84.

58.—Bieter, R. N. and Hirschfelder, A. D. The excretion of dyes and other substances in the Frog's kidney and its bearing upon the theories of renal secretion. Amer. J. Physiol. Baltimore **68** 1924 pp. 326–337 3 figs.

59.—Bishop, S. C. Notes on Salamanders. New York State Mus. Bul. **253** 1924 pp. 87–98 pls. 1–3.

60. Blanchard, F. N. The Type Locality of *Diadophis amabilis similis*. Copeia Northampton U.S.A. **130** 1924 p. 56.

61.—Blanchard, F. N. The Status of *Amphiardis inornatus* (Garman). Copeia Northampton U.S.A. **134** 1924 pp. 83–85.

62.—Bock, F. Zur Frage der Ernährung von Amphibien-Larven durch im Wasser gelöste Nährstoffe. Zool. Anz. Leipzig **61** 1924 pp. 171–176.

63.—Bogucki, M. La régénération du testicule de la salamandre. Bul. intern. Acad. Krakow **1914** pp. 817–826 2 plates.

64.—Bogucki, M. Effet de la castration sur le caractère cyclique des variations de l'oviducte de la grenouille. Bul. intern. Acad. Krakow **1918** pp. 165–184 1 plate.

65.—Bolkay, St. J. Answer to Dr. Baron G. J. von Fejérváry's "Kritische Bemerkungen zur Osteologie, Phylogenie und Systematik der Anuren." Glasnik. Zemal. jskog muz. Bosni Herceg. Sarajevo **34** 1921–1922 pp. 197–206.

66.—Bolkay, St. J. Popis vodozemaca i gmizavaca, koje se nalaze u bos.-herc. zemaljskom muzeju u Sarajeva s morfološkim, brološkim j zoogeografskim bilješkama. [A List of the Amphibians and Reptiles, preserved in the Bosnian-Hercegovinian Land Museum, with morphological, biological and zoogeographical notes—English Résumé.] Mem. Serb. Roy. Acad. Sarajevo **61** 1924 pp. 1–37 (separate) pls. 1–7.

67.—Bolkay, St. J. The rôle of the regenerated tail of the Lacertidae at the preservation of the species. Glasn. Zemal. Muz. Bosni Herc. Sarajevo **36** 1924 pp. 91–94.

Bonnet, M. *vide* Barthélemy, H.

68.—Bouckaert, J. P. Méthode pour l'étude du métabolisme du coeur de Grenouille. C.R. soc. biol. Paris **90** 1924 pp. 1295–1298 text-fig.

69.—Bouckaert, J. P. et **Belehradek,** J. Influence de la concentration du sodium sur la contraction musculaire chez la Grenouille. C.R. soc. biol. Paris **90** 1924 pp. 1298–1300 table.

70.—Boulenger, E. G. On a new Giant Salamander, living in the Society's Gardens. Proc. Zool. Soc. London **1924** pp. 173–174.

71.—Bounoure, L. Dérivés endodermiques dorsaux et premiére ébauche génitale chez les Batraciens Anoures. C.R. Acad. Sci. Paris **178** 1924 pp. 339–341.

72.—Bounoure, L. Origine des gonocytes primaires chez les Urodèles et signification de ces éléments chez les Amphibiens en général. C.R. Acad. Sci. Paris **179** 1924 pp. 1082–1084.

73.—Brady, M. K. *Pseudotriton montanus* near Washington. Copeia Northampton U.S.A. **130** 1924 pp. 54–55.

74.—Breder, R. B. On the manner of food taking in metamorphosing Newts. Copeia Northampton U.S.A. **129** pp. 47–48.

75.—Breder, R. B. Notes on the Drinking Habits of *Terepene carolina* (Linnæus). Copeia Northampton U.S.A. **131** 1924 pp. 63–64.

76. Bremer, F. Physiologie de l'Hypophyse. Ann. Bull. sci. med. nat. Bruxelles **1923** pp. 129–157 9 figs.

77.—Bremer, J. L. On the variation of wall thickness in embryonic arteries. Anat. Rec. Philadelphia **27** 1924 pp. 1–13 figs. 1–5.

78.—Bremer, J. L. Mechanical factors governing the position of the coeliac artery in chick and turtle. Amer. J. Anat. Philadelphia **34** 1924 pp. 215–239 7 figs.

79.—Brennan, G. A. A case of death from *Heloderma* bite. Copeia Northampton U.S.A. **129** 1924 p. 45.

Bricka, M. *vide* Schwartz and Bricka.

80.—Brimley, C. S. The Water Dogs (*Necturus*) of North Carolina. J. Elisha Mitchell Sci. Soc. Chapel Hill U.S.A. **40** 1924 pp. 166–168.

81.—Broom, R. On some points in the structure of the Pareiasaurian skull. Proc. Zool. Soc. London **1924** pp. 499–508 text-figs. 1–6.

82.—Broom, R. On the classification of the Reptiles. Bul. Amer. Mus. Nat. Hist. New York **51** 1924 pp. 39–65 13 figs. and family tree.

83.—Broom, R. Further evidence on the structure of the Eosuchia. Bul. Amer. Mus. Nat. Hist. New York **51** 1924 pp. 67–76 4 figs.

84.—Brücke, E. T. Ueber die Sympathische Innervation des Krötenhaut. Zs. biol. München **74** 1921 pp. 99–112 2 plates 3 figs.

85.—Brücke, E. T. Nachprüfung der sympathischen Innvervation der Krötenhaut. Zs. biol. München **79** 1924 pp. 174–178.

86.—Bruni, A. C. Appunti sulla morfologia della Pars neglecta del labirinto acustico di *Bufo vulgaris*. Atti. Soc. ital. sci. nat. Milano **63** 1924 pp. 208–217 3 figs.

87.—Bryce, D. The Rotifera and Gastrotricha of Devil's and Stump Lakes, North Dakota, U.S.A. J. Quex. Microsc. Club London **15** no. **90** pp. 81–108 (note on Batrachians in Salt water p. 83).

88.—Burns, R. K. The sex of parabiotic twins in amphibians. Anat. Rec. Philadelphia **27** 1924 p. 198.

89.—Caius, J. F. et **Steichen,** A. Notes on the concentration of anticobra serum. Ind. J. Med. Res. Calcutta **11** 1924 pp. 1163–1172.

90.—Caius, J. F., **Iyengar,** K. R. K. and **Anderson,** L. A. P. Notes on the concentration of anticobra serum. Ind. J. Med. Res. Calcutta **12** 1924 pp. 153–156.

91.—Calabresi, E. Anfibi e Rettili dell'Africa orientale raccolti durante le Spedizioni Franchetti e Zammarano. Atti Soc. ital. Sci. nat. Milano **62** 1923 pp. 145–163 1 pl.

92.—Calabresi, E. A proposito di speciali appendici sensoriali presenti nella pelle di *Xenopus laevis* (Daud.). Monitore zool. Firenze **35** 1924 pp 90–102 2 plates 4 figs.

Cannon, H. G. *vide* Baylis, H. A.

93.—Case, E. C. A possible explanation of fenestration in the primitive Reptilian skull, with notes on the temporal region of the genus *Dimetrodon*. Contr. Mus. Geol. Univ. Michigan **2** (1) pp. 1–12 text-figs. 1–5.

94.—Chabanaud, P. Description d'un Chamaeleon nouveau d'Indo-Chine et d'un exemplaire monstruex d'*Enhydris hardwicki* Gray. Bul. Muséum Paris **29** 1923 pp. 209–210.

95.—Chabanaud, P. Sur divers vertébrés à sang froid de la Région Indo-Chinaise. Bul. Muséum Paris **29** 1923 p. 558.

96.—Chabanaud, P. Reptiles recueillis par M. Th. Monod en Mauritanie et aux Îles du Cap-Vert. Bull. Mus. Hist. Nat. Paris **1924** p. 54.

97.—Champy, C. La Spermatogénèse chez *Discoglossus pictus* (Otth.). Arch. Zool. Paris **62** 1923 pp. 1–52 pl. 1 text-figs. 1–36.

98.—Champy, C. Considérations paradoxales sur la puberté C.R. soc. biol. Paris **90** 1924 pp. 81–83.

98a.—Champy, C. À propos de caractères sexuels des Anoures. C.R. soc. biol. Paris **90** 1924 pp. 838–840.

99.—Champy, C. À propos de la spermatogénèse des Grenouilles. (Réponse à Aron.) C.R. soc. biol. Paris **91** 1924 pp. 174–175.

Child, C. M. *vide* Bellamy et Child.

100.—Clark, E. R. et E. L. On the development of adventitial (" Rouget ") cells on the blood capillaries. Anat. Rec. Philadelphia **27** 1924 p. 200.

101.—Cochran, D. Notes on the herpetological collections made by Dr. W. L. Abbott on the island of Haiti. Proc. U. S. Nation. Mus. Washington **66** art. 6 1924 pp. 1–15.

102.—Cochran, D. M. *Typhlops lumbricalis* and related forms. J. Washington Acad. Sci. **14** 1924 pp. 174–177.

103.—Coghill, G. E. Correlated anatomical and physiological studies of the growth of the nervous system in Amphibia. III. The Floor Plate of *Amblystoma*. J. Comp. Neur. Philadelphia **37** 1924 pp. 37–69 **43** figs.

104.—Coghill, G. E. Correlated anatomical and physiological studies of the growth of the nervous system in Amphibia. III. Rates of proliferation and differentiation in the central nervous system of *Amblystoma*. J. Comp. Neur. Philadelphia **37** 1924 pp. 71–109 20 figs.

105.—Coghill, G. E. et **Moore,** J. The vascular system in relation to neuro-muscular functions in the early development of *Amblystoma*. Anat. Rec. Philadelphia **28** 1924 pp. 131–148 text-figs. 1–13.

Coghill, G. E. *vide* Stevenson and Coghill.

106.—Cords, E. Das Herz eines lungenlosen Salamanders (*Salamandrina perspicillata*). Anat. Anz. Jena **57** 1924 pp. 205–213 4 figs.

107.—Cott, H. B. A rare Lizard. Natureland Manchester **3** 1924 p. 12–photo.

108.—Couvreur, E. et **Duculty,** J. L'innervation cardiaque chez les Crocodiliens. Arch. internat. Physiol. Liège-Paris **24** 1924 pp. 104–111 4 figs.

109.—Crofts, E. E. and **Laurens,** H. Studies on the relative physiological value of spectral lights. V. The alleged influence of light upon respiration in the Frog. Amer. J. Physiol. Baltimore **70** 1924 pp. 300–310.

110.—Crozier, W. J. Opisthotonic death in a Salamander. Amer. Nat. New York **58** 1924 pp. 479–480 fig.

111.—Cyrén, O. Klima und Eidechsenverbreitung. Eine Studie der geographischen Variation und Entwicklung einiger Lacerten, insbesondere unter Berüchsichtigung der klimatischen Faktoren. Göteborg. **1924.**

Cyrén, O. *vide* Lantz, L. A.

112.—Czarewsky, S. T. Reptiles et amphibies, collectionnés par V. J. Lazdin dans la Soukharie méridionale et orientale ainsi que dans la partie N.-E. de la Province Transcaspienne en été 1915. Ann. Mus. Zool. Petrograd **22** 1922 pp. 79–90.

113.—Czarewsky, S. T. A note on the identity of *Phyllodactylus elisae* Wern. and *Phyllodactylus eugeniae* Nik. Ann. Mus. Zool. Petrograd **24** 1923 pp. 101–103.

114.—Dauwart, A. Ein bis jetzt unbekanntes zyklisches Geschlechtsmerkmal der Batrachier. Saisonvariation des Vorderextremitätenskelettes des Frosches. Arch. mikr. Anat. Entwickl. Berlin **103** 1924 pp. 504–516 1 fig.

115.—Davey, H. W. Marbled Geckos hatched in captivity. Vict. Nat. Melbourne **41** 1924 p. 51.

116.—Degerbøl, M. Description of a new snake of the genus *Glauconia* from Mendoza. Videns. Medd. Nat. For. Kjøbenhavn **76** 1923 pp. 113–114 text-figs. 1–3.

117.—Dehaut, E. G. Contribution à l'étude de la vie vertébrée insulaire dans la Région Méditerranéenne occidentale et particulièrement en Sardaigne et en Corse. Paris 1920.

118.—Dempe, H. Zur Morphologie des Epistriatums bei *Lepidosternum microcephalum* und *Chamaeleon vulgaris*. Anat. Anz. Jena **58** 1924 pp. 270–278 9 figs.

Denburgh, J. van *vide* Van Denburgh.

119.—Dennert, W. Ueber den Bau und die Rückbildung des Flossensaums bei den Urodelen. Zs. ges. Anat. München **72** 1924 pp. 407–462 50 figs.

120.—Depéret, C. et **Russo,** P. Sur une faune sénonienne de Mosasauriens et de Crocodiliens à la base des couches phosphatées de Melgou (Maroc occidental). C.R. Acad. Sci. Paris **178** 1924 pp. 1666–1670.

121.—Despax, R. Notes Batrachologiques I. Un cas de coloration anormale chez une grenouille verte, *Rana esculenta* L. Bull. soc. Hist. Nat. Toulouse **52** 1924 pp. 62–64.

122.—Despax, R. Notes Batracologiques II. Remarques sur la distribution topographique de l'Euprocte corse, *Euproctus montanus* Savi aux environs de Corte. Bull. soc. Hist. Nat. Toulouse **52** 1924 pp. 65–67.

123.—Despax, R. Notes Batrachologiques III. Influence de l'altitude sur l'époque de ponte de l'Euprocte des Pyrénées *Triton* (*Hemitriton*) *asper* Dugès. Bull. soc. Hist. Nat. Toulouse **52** 1924 pp. 112–113.

Dickey, A. B. *vide* Speidel, C. C.

124.—Döderlein, L. *Anurognathus ammoni*, ein neuer Flugsaurier. Sitzber. Ak. Wiss. München **1923** pp. 117–164 7 figs.

125.—Dolivo-Dobrovolsky, V. L' Anatomie du crane du Protée (*Proteus anguinus* Laur.). Arch. Zool. Paris (Notes et Revue) **62** 1924 pp. 1–3.

126.—Dollo, L. *Globidens alabamaensis*, Mosasaurien mylodonte américain retrouvé dans le Craie d'Obourg (Sénonien supérieur) du Hainaut, et les Mosasauriens de la Belgique, en général. Arch. biol. Liège-Paris **34** 1924 pp. 167–213 pl. 5 tables.

127.—Dombrowski, B. Ueber einige Gesetzmässigkeiten im Aufbau des Schalleitenden und Kieferapparatus der Tetrapoden. Zs. ges. Anat. München **75** 1924 pp. 69–81 6 figs.

128.—Douglas, B. Action empêchante de l'adrénaline sur l'absorbion du venin de Cobra par la peau. C.R. soc. biol. Paris **91** 1924 pp. 1223–1224.

129.—Drzewicki, S. La métamorphose partielle de la peau des têtards de *Pelobates fuscus* Laur, sous l'influence de quantités minimales de substance de la glande thyroïde. C.R. soc. biol. Paris **90** 1924 pp. 1364–1366.

Duculty, J. *vide* Couvreur et Duculty.

130.—Duesberg, J. La régénération des ganglions et de leurs connexions médullaires dans la queue des Urodèles. C.R. soc. biol. Paris **90** 1924 pp. 633–634.

131.—Dunn, E. R. New Salamanders of the genus *Oedipus* with a synoptic key. Field Mus. Nat. Hist. publ. zool. ser. Chicago 221 **12** (7) 1924 pp. 95–100.

132.—Dunn, E. R. *Siren*, a herbivorous Salamander? Science New York **59** 1924 p. 145.

133.—Dunn, E. R. Some Panamanian Frogs. Occ. Pprs. Mus. Zool. Michigan no. **151** 1924 pp. 1–16.

134.—Dunn, E. R. New Amphibians from Panama. Occ. Pprs. Boston Soc. Nat. Hist. **5** 1924 pp. 93–95.

135.—Dunn, E. R. *Amastridium*, a neglected genus of snakes. Proc. U. S. Nation. Mus. Washington **65** art. 11 1924 pp. 1–3

136.—Dunn, E. R. A new specimen of *Leurognathus marmorata.* Copeia Northampton U.S.A. **127** 1924 pp. 31–32.

137.—Duschak, F. Zur Corpus luteum-Frage bei den Anuren. Zs. ges. Anat. München **24** 1924 pp. 608–613 4 figs.

138.—Edinger, T. Rückenmark im Wirbelkörper! Anat. Anz. Leipzig **57** 1924 pp. 515–519 4 figs.

139.—Ehrenpreis, A. Milztransplantation an arterwachsenen Urodelen. Arch. mikr. Anat. Entwickl. Berlin **102** 1924 pp. 573–583 7 figs.

140.—Eisinger, K. et **Sternberg,** H. Beiträge zur Entwicklungsmechanik des inneren Ohres. Arch. mikr. Anat. Entwickl. Berlin **100** 1924 pp. 542–559 12 figs.

141.—Ekman, G. Neue experimentelle Beiträge zur frühesten Entwicklung der Kiemenregion und Vorderextremität der Anuren. Comm. Biol. Soc. Sci. Fennica Helsingfors **1** (3) 1922 pp. 1–96 text-figs. 1–64.

142.—Ekman, G. Über die Regeneration der Nasenanlage bei *Rana fusca.* Comm. Biol. Soc. Sci. Fenn. Helsingfors **1** (6) 1923 pp. 3–23.

143.—Emmel, U. E. Studies on the non-nucleated elements of the Blood. 2. The occurrence and genesis of non-nucleated erythrocytes or erythroplastids in vertebrates other than mammals. Amer. J. Anat. Philadelphia **33** 1924 pp. 347–406 7 plates.

144.—Engelhardt, F. Tentakelapparat und Auge von *Ichthyophis.* Jenaische Zs. naturw. **60** 1924 pp. 241–304 8 pls.

145.—Engle, E. T. Stomach stones again. Copeia Northampton U.S.A. **128** 1924 pp. 37–38.

146.—Fahrenholz, C. Ueber eine ventrale Oeffnung der Leberanlage anurer Amphibien und deren morphologische Bedeutung. Zs. ges. Anat. München **69** 1923 pp. 344–381 1 plate 11 figs.

147.—Fahrenholz, C. Ueber die Gesichtsentwicklung der Geburtshelferkröte (*Alytes obstetricans*). Anat. Anz. Jena (Verh. Anat. Ges.) **58** 1924 pp. 281–283.

148.—Faris, H. S. A study of pigment in embryos of Amblystoma. Anat. Rec. Philadelphia **27** 1924 pp. 63–76.

149.—Fedorowicz, Z. Beitrag zur Kenntnis der Anatomie und Entwicklung einiger Venen bei Amphibien. Bul. intern. Acad. Krakow 1914 pp. 395–409 1 plate.

150.—Fedorowicz, Z. Embouchure des coeurs lymphatiques dans les veines des amphibies. Bul. intern. Acad. Krakow **1920** pp. 56–61 2 figs.

151.—Fejéváry, G. J. de. Preliminary notes to a monograph of the Lacertian Fauna of the Maltese Islands. Biol. Hungarica Budapest **1** (5) 1924 pp. 1–14.

152.—Felicine-Gurwitsch, L. Die Verwertung des Feldbegriffes zur Analyse embryonaler Differenzierungsvorgänge. Arch. mikr. Anat. Entwickl. Berlin **101** 1924 pp. 40–52 7 figs.

153.—Fenn, W. O. Active principles of the pituitary posterior lobe. J. Physiol. Cambridge **59** 1924 (Proc. Physiol. Soc.) xxxv-xxxvi.

Fialho, B. de A. *vide* Almeida et Fialho.

154.—Flower, S. S. A remarkable Tortoise of the genus *Testudo.* Proc. Zool. soc. London **1924** pp. 920–921.

155.—François, M. et **Pieron,** H. Le pourpre rétinien est-il l'unique substance photochimique commune aux cônes et aux batonnets de la rétine. C.R. Soc. biol. Paris 91 1924 pp. 1073–1075.

156.—Franz, U. Mikroskopische Anatomie der Hilfsteile des Sehorgans der Wirbeltiere. Zs. ges. Anat. München (Ergebn. Anat. Entwickl.) **25** 1924 pp. 241–381 54 figs.

157.—Frazier, M. A contribution to the anatomy of the Amphibian larynx. J. Morph. Philadelphia **39** 1924 pp. 285–291 2 plates.

158.—Fries, C. Zur Phylogenie des Schildkrötenpanzers. Zool. Anz. Leipzig **61** 1924 pp. 277–280.

Fulton, J. F. *vide* Huxley, J. S. et Fulton.

159.—Gambier, H. Sur un Parasite et pathogène des Tritons; *Hepatosphoera molgarum* n. g., n. sp. C.R. soc. biol. Paris **90** 1924 pp. 439–441.

160.—Gargano, C. Le alterazioni prodotte nel fegato della *Lacerta muralis* Laur. dal *Cysticercus dithyridium.* Boll. soc. nat. Napoli **35** 1923 pp. 3–18 2 plates.

161.—Garofolini, L. Lo sviluppo del sistema cromaffine e la comparsa della cromoreazione nel *Triton cristatus.* Atti Acc. Lincei Roma **33** (2) 1924 pp. 193–196.

162.—Garofolini, L. L'utilizzazione del *Triton cristatus* per la distruzione delle larve di anofele. Atti Acc. Lincei Roma **33** (2) 1924 pp. 427–431.

163.—Gassul, R. Experimentelle Studien über Auspflanzung, Ueberpflanzung und Regeneration von Explanten aus erwachsener Froschhaut. Arch. Entw. Mech. Berlin **52** 1923 pp. 400–446 27 figs.

164.—Gelderen, C. van. Die Morphologie der Sinus durae matris. Erster Teil. Die vergleichende Ontogenie der neurokraniellen Venen der Anamnier und Reptilien. Zs. ges. Anat. München **73** 1924 pp. 541–605 38 figs.

165.—Gelderen, C. van. Zur vergleichenden Anatomie des Sinus durae matris. Anat. Anz. Jena **57** 1924 pp. 472–487 2 figs.

166.—Gelderen, C. van. Zur vergleichenden Anatomie der Sinus durae matris. Anat. Anz. Jena **58** 1924 pp. 472–480 1 fig.

167.—Gellhorn, E. Physiologische Untersuchungen an Spermatozoen und Eiern. Ein Beitrag zum Befruchtungsproblem. Arch. mikrosk. Anat. Entw. Berlin **101** 1924 pp. 437–443.

168.—Giacomini, E. L'azione dello iodio sullo sviluppo e sulla metamorfosi delle larve degli Anfibii Anuri. Nota 4a. Rend. Acc. Sci. Bologna **27** 1923 pp. 188. 199.

169.—Giersberg, H. Beiträge zur Entwicklungsphysiologie der Amphibien. 1. Furchung und Gastrulation bei *Rana* und *Triton.* Arch. mikr. Anat. Entwickl. Berlin **103** 1924 pp. 368–386 10 figs.

170.—Giersberg, H. Beiträge zur Entwicklungsphysiologie der Amphibien. 2. Neuralation bei *Rana* und *Triton.* Arch. mikr. Anat. Entwickl. Berlin **103** 1924 pp. 387–479 21 figs.

171.—Giglio-Tos, E. Entwicklungsmechanische Studien. Part 5. Die Furchung unter künstlichen Bedingungen. Arch. mikr. Anat. Entwickl. Berlin **103** 1924 pp. 206–258 3 figs.

172.—Gilmore, C. W. Contributions to vertebrate Palaeontology. Canada Geol. Survey Bull. **38** 1924 pp. 1–64 text-figs. 1–17 pls. i–ii.

173.—Gilmore, C. W. Expedition to the Dinosaur national monument, Utah. Smithsonian Misc. Collect. **76** 1924 pp. 12–16 6 figs.

174.—Giorgi, P. de. Les potentialités des régénérats chez *Salamandra maculosa.* Rev. Suisse Zool. Genève **31** 1924 pp. 1–50 1 pl. 6 figs.

175.—Giusti, L. et **Houssay,** B. A. Modification cutanées et génitales produites chez le Crapaud par l'extirpation de l'hypophyse ou par lésion du cerveau. C.R. Soc. biol. Paris **91** 1924 pp. 313–317 2 figs.

176. — Glaesner, L. Ueber drei Doppelbildungen von *Chelone mydas.* Zool. Anz. Leipzig 60 pp. 185–194 5 figs.

177.—Godlewski, E. L'hérédité dans les cellules végétatives au cours de la regeneration chez l'axolotl. Bul. intern. Acad. Krakow **1922** pp. 93–100 1 pl.

178.—Goetsch, W. Lebensraum und Körpergrösse. 1. Beobachtungen an Hydren, Planarien und Amphibien-Larven. Biol. Zentralbl. Leipzig **44** 1924 pp. 529–560.

179.—Golgi, M. E. C. Intorno alla struttura ed alla biologia dei cosidetti globuli (o piastrine) del Tuorlo. Mem. Inst. Lombard. Sci. Lett. Milano ser. 3 **22** (3) pp. 161–173 pl.

180.—Goodrich, E. S. The Origin of Land Vertebrates. Nature London **114** 1924 pp. 935–936 1 fig.

Graeser, J. B. *vide* Smith, P. E.

181.—Gräper, L. Gedanken über die tierische Entwicklung. Anat. Anz. Jena **58** 1924 pp. 80–88.

182.—Greenwood, A. W. The growth rate in hypophysectomised Salamander larvae. Brit. Journ. Exper. Biol. Edinburgh **2** 1924 pp. 75–78.

183.—Gregory, W. K. et **Noble,** G. K. The origin of the Mammalian alisphenoid bone. J. Morph. Phys. Philadelphia **39** 1924 pp. 435–463 pl. 1 text-figs. 1–13.

184.—Grinnell, J. et **Storer,** T. J. Animal Life in the Yosemite. U. of Calif. Press, San Francisco **1924** pp. xviii + 752 pls. i–lx figs. 1–65 maps.

185.—Grobbelaar, C. S. Beiträge zu einer anatomischen Monographie von *Xenopus laevis* (Daud.). Zs. ges. Anat. München **72** 1924 pp. 131–168 15 figs.

186.—Grobbelaar, C. S. On the venous and arterial system of the "Platanna" (*Xenopus laevis*, Daud.). S. Afri. J. Science **21** 1924pp. 392–398. 2 figs.

187.—Groebbels, F. Unzureichende Ernährung und Hormonwirkung. I. Untersuchungen über den Effekt der gegenseitigen Beeinflussung unzureichender Ernährung und Schilddrüsenfütterung auf das Wachstum und die Entwicklung von Froschlarven. Zs. Biol. München **75** 1922 pp. 91–120 1 plate 5 figs.

188.—Groebbels, F. Unzureichende Ernährung und Hormonwirkung. II. Der Einfluss unzureichender Ernährung und Schilddrüsenfütterung auf den Sauerstoffverbrauch von Larven der *Rana temporaria*. Zs. Biol. München **75** 1922 pp. 155–168 1 fig.

189.—Groebbels, F. Unzureichende Ernährung und Hormonwirkung. III. Die Beziehungen zwischen unzureichender Ernährung und Thymuswirkung bei Larven von *Rana temporaria*. Zs. biol. München **77** 1922 pp. 249–260 2 figs.

190.—Groebbels, F. Unzureichende Ernährung und Hormonwirkung. VI. Untersuchungen über den Einfluss einiger unspezifischer Nahrungsstoffe auf das Wachstum und die Entwickelung von Froschlarven. von O. **Schlüns.** Zs. Biol. München 79 **1924** pp. 121–124 1 fig.

191.—Groebbels, F. and E. **Kuhn.** Unzureichende Ernährung und Hormonwirkung. IV. Der Einfluss der Zirbeldrüsen- und Hodensubstanz auf Wachstum und Entwicklung von Froschlarven. Zs. Biol. München **78** 1923 pp. 1–6.

192.—Grodziński, Z. Ueber die Entwicklung der Gefässe des Dotterdarmes bei Urodelen. Bul. intern. acad. Krakow **1924** pp. 57–67 1 plate 1 fig.

193.—Gunther, R. T. Intercostal blood-vessels in Mesozoic Crocodiles. Proc. Geol. Ass. London **35** 1924 pp. 263–264 1 plate.

194.—Guthrie, J. E. The Banana Snake, *Boa imperator*. Proc. Iowa Acad. Sci. **30** 1924 pp. 189–196.

195.—Haan, J. de et **Bakker,** A. Renal function in summer Frogs and winter Frogs. J. Physiol. Cambridge **59** 1924 pp. 129–137.

196.—Haecker, V. Entwicklung und Vererbung. Einige Bemerkungen zu H. Spemann's Münchner Referat. Zs. indukt. Abstammgl. Leipzig **35** 1924 pp. 156–160.

197.—Haller, G. Ueber die Entwicklung der Hypophyse bei Reptilien. Morph. Jahrb. Leipzig **53** 1924 pp. 305–318 9 figs.

198.—Hargitt, G. T. Germ cell origin in the adult Salamander, *Diemyctylus viridescnes*. J. Morph. Philadelphia **39** 1924 pp. 63–112 7 plates.

199.—Harms, W. Untersuchungen über das Biddersche Organ der männlichen und weiblichen Kröten. 2. Die Physiologie des Bidderschen Organs und die experimentell-physiologische Umdifferenzierung von Männchen und Weibchen. Zs. ges. Anat. München **69** 1923 pp. 598–629 6 figs.

200.—Hartmann, A. Die Entstehung der ersten Gefässbahnen bei Embryonen urodeler Amphibien (*Salamandra atra* und Axolotl) bis zur Ruckbildung des Dotterkreislaufs. Zs. ges. anat. München **70** 1924 pp. 260–307 2 plates 13 figs.

Hartmann, A. *vide* Pauli et Hartmann.

201.—Haughton, S. H. On Reptilian remains from the Karroo Beds of East Africa. Q. J. Geol. Soc. London **80** 1924 pp. 1–10 2 plates 3 figs.

202.—Haughton, S. H. On Cynodontia from the Middle Beaufort Beds of Harrismith, Orange Free State. Ann. Transvaal Mus. Pretoria **11** 1924 pp. 74–92 4 pls. and 14 figs.

203.—Haughton, S. H. On a new type of Thecodont from the Middle Beaufort Beds. Ann. Transvaal Mus. Pretoria **11** 1924 pp. 93–97 2 pl. 2 figs.

204.—Haughton, S. H. Contributions to the distribution of life in the southern hemisphere. II. Geological Trans. R. Soc. S. Afr. Cape Town **12** (1) 1924 (1922) pp. cxv–cxvii.

205.—Haughton, S. H. The fauna and stratigraphy of the Stormberg Series. Ann. S. Afr. Mus. Cape Town **12** 1924 pp. 323–497.

206.—Haughton, S. H. On some Gorganopsian skulls in the collection of the South African Museum. Ann. S. Afr. Mus. Cape Town **12** 1924 pp. 499–517.

207.—Haughton, S. H. On as kull and partial skeleton of *Mesosuchus browni* Watson. Trans. R. Soc. S. Afr. Cape Town **12** (2) 1924 pp. 17–26 pls. i–ii text-fig. 1.

208.—Haughton, S. H. A bibliographic list of Pre-Stormberg Karroo Reptilia, with a table of horizons. Trans. R. Soc. S. Afr. Cape Town **12** (2) 1924 pp. 51–104 tables.

209.—Hayek, H. Ueber das Schicksal des Proatlas und über die Entwicklung der Kopfgelenke bei Reptilien und Vögeln. Morph. Jahrb. Leipzig **53** 1924 pp. 137–163 2 plates.

210.—Helff, O. M. The oxygen-consumption of thyroid and diiodotyrosine-fed tadpoles. Proc. Soc. Exp. Biol. Med. New York **21** 1923 pp. 34–39.

211.—Helff, O. M. Factors involved in the formation of the opercular leg perforation in anuran larvae during metamorphosis. Anat. Rec. Philadelphia **29** 1924 p. 102.

212.—Hemmingsen, A. M. The action of insulin in the frog and some invertebrates. Preliminary communication. Skand. Arch. Physiol. Leipzig **46** 1924 pp. 56–63.

213.—Henderson, J. Footprints in Pennsylvanian Sandstones of Colorado. J. Geol. Chicago **32** 1924 p. 226.

214.—Herbst, C. Beiträge zur Entwicklungsphysiologie der Färbung und Zeichnung der Tiere. 2. Die Weiterzucht der Tiere in gelber und schwarzer Umgebung. Arch. mikr. Anat. Entwickl. Berlin **102** 1924 pp. 130–167 32 figs.

215.—Herrick, C. J. The Amphibian forebrain. I. *Amblystoma,* external form. J. Comp. Neur. Philadelphia **37** 1924 pp. 361–372 6 figs.

216.—Herrick, C. J. The Amphibian forebrain. II. The olfactory bulb of Amblystoma. J. Comp. Neur. Philaphia **37** 1924 pp. 373–396 11 figs.

217.—Hertling, H. Ueber einen Fall von Gleichgewichtsstörung nach einseitiger Verletzung der Medulla oblongata bei einer Blindschleiche aus freier Natur. Arch. ges. Physiol. Berlin **202** 1924 pp. 301–307 3 figs.

218.—Hertwig, G. Die Entwicklung von Froscheiern ohne äussere Nahrungszufuhr. Anat. Anz. Jena (Verh. Anat. Ges.) **58** 1924 pp. 220–223.

219.—Hertwig, G. Trypaflavin als Radiumersatz zur Gewinnung haploidkerniger Froschlarven. Anat. Anz. Leipzig (Verh. Anat. Ges.) **58** 1924 pp. 223–227.

220.—Herwerden, M. A. van. Umkehrbare Gelbildung in den Zellen eines mehrzellingen Organismus. Biol. Zentralbl. Leipzig **44** 1924 pp. 579–582.

221.—Herwerden, M. A. van. L' influence de petites quantités d'écorce de surrénale sur la croissance et le pouvoir de reproduction. Arch. Néerl. Sci. Soc. Holl. Haarlem **9** 1924 pp. 381–384.

222.—Hett, J. Das Corpus luteum der Zanneidechse (*Lacerta agilis*). Zs. mikr. anat. Forsch. (Abt. 2 of Morph. Jahrb.) Leipzig **1** 1924 pp. 41–84 18 figs.

223.—Hewer, H. R. On certain abnormalities occurring in the pituitary of the Frog. Proc. R. Soc. Lond. **B 97** 1924 pp. 41–48 2 plates.

224.—**Hewitt,** J. A Note on the distribution of certain Toads, considered in reference to their former lines of dispersal. Trans. R. Soc. S. Afr. Cape Town **12** (1) 1924 (1922) pp. cxxv–cxxviii.

Hirschfelder, A. D. *vide* Bieter et Hirschfelder.

225.—**Hirschler,** J. Technische Hinweise zum operativen Vorgehen (Transplantation, Inplantation, etc.) an Amphibien und Insektenlarven. Arch. mikr. Anat. Entwickl. Berlin **103** 1924 pp. 357–367.

226.—**Hofmann,** F. B. Ein Modell des Froschherzens. Sitz. Ges. Natw. Marburg **1921** 1922 pp. 57–59.

227.—**Hogben,** L. T. The pigmentary effector system IV. Brit. J. Exper. Biology **1** 1924 pp. 249–270 text-figs. 1–3.

228.—**Hogben,** L. T. The pigmentary effector system. Biological monographs and manuals, Edinburgh & London **1924** pp. viii + 1–152 text-figs. 1–18.

229.—**Holland,** W. J. The skull of *Diplodocus*. Mem. Carnegie Mus. Pittsburgh **9** 1924 pp. 379–403 pls. 40–43 text-figs. 1–11.

230.—**Holland,** W. J. Description of the type of *Uintasaurus douglassi* Holland. Ann. Carnegie Mus. Pittsburgh **15** 1924 pp. 119–138 pls. 10–15 text-figs. 1–7.

231.—**Holt,** E. G. Additional records for the Alabama herpetological catalogue. Copeia Northampton U.S.A. **135** 1924 pp. 93–95.

232.—**Holt,** E. G. Additional records for the Alabama herpetological catalogue. Copeia Northampton U.S.A. **136** 1924 pp. 100–101.

233.—**Hora,** S. L. The adhesive apparatus on the toes of certain Geckos and Tree-frogs. J. Asiat. Soc. Beng. Calcutta **19** 1924 pp. 137–145.

234.—**Houssay,** B. A. et **Ungar,** I. Modifications produites chez la Grenouille par L'hypophysectomie ou par les lésions cérébrales. C.R. soc. biol. Paris **91** 1924 pp. 317–318.

235.—**Houssay,** B. A. et **Ungar,** I. Action de l'hypophyse sur la coloration des Batraciens. C.R. soc. biol. Paris **91** 1924 pp. 318–320.

Houssay, B. A. *vide* Giusti, L.

236.—**Huber,** E. Ueber die Bedeutung der experimentellen Methode in der Facialisforschung, nebst Betrachtungen über die phylogenetische Entwicklung der Facialismuskulatur in der Vertebraten-Reihe. Anat. Anz. Jena **58** 1924 pp. 177–205.

237.—**Humphrey,** R. R. The development of interstitial cells in urodeles in correlation with regressive or degenerative changes in the testis. Anat. Rec. Philadelphia **27** 1924 p. 206.

238.—**Huxley,** J. S. Early Embryonic differentiation. Nature London **113** 1924 pp. 276–278.

239.—**Huxley,** J. S. and **Fulton,** J. F. The influence of temperature on the action of insulin. Nature London **113** 1924 p. 234.

240.—**Isayama,** S. Ueber die Strömung der Lymphe bei den Amphibien. Zs. Biol. München **82** 1924 pp. 91–100.

241.—**Ishiwara,** F. Die pharmakologische Wirkung über die Gifte der Kobra- und Habuschlange, nebst pathologisch-anatomischem Befund. Arch. exper. Path. Leipzig **103** 1924 pp. 219–222.

Iyengar, K. R. K. *vide* Caius, Iyengar et Anderson.

242.—**Jensen,** A. En Hugorm fra Djursland. (Variations of the abdominal colour of the Viper in Denmark. Danish.) Flora og Fauna Kjøbenhaven **1923** pp. 125–127.

243.—**Jordan,** H. E. A study of the blood of the Leopard Frog. Anat. Rec. Philadelphia **27** 1924 p. 207.

244.—**Jordan,** H. E. The experimental production of osteoclasts in the femur of the frog. Anat. Rec. Philadelphia **29** 1924 pp. 97–98.

245.—**Jordan,** H. E. et **Speidel,** C. C. The fundamental erythropoietic stimulus. Anat. Rec. Philadelhpia **27** 1924 p. 183.

246.—Joynson, H. W. Occurrence of the Rat Snake (*Zaocys carinatus*) in North Siam. J. Nat. Hist. Soc. Siam Bangkok **6** (3) 1927 pp. 314–315.

247.—Kalocsay-Kalusza, B. Sur la restitution du testicule de la grenouille brune (*Rana fusca* sive *temporaria* L.). Bul. intern. Acad. Krakow **1919** B pp. 308–319 3 plates.

248.—Kanberg, H. Ueber eine neue Schildkröte aus Kamerun. Zool. Anz. Leipzig **60** 1924 pp. 195–197 1 fig.

249.—Kändler, R. Die Sexuelle Ansgestaltung der Vorderextremität der Anuren Amphibien. Jenaische Zs. Naturw. **60** 1924 pp. 175–240 2 pl. 34 figs.

250.—Kaufman, L. On the metamorphosis of *Amblystoma mexicanum* Cope fed on thyroidine. Bul. intern. Acad. Krakow **1917** pp. 54–56 1 plate.

251.—Kaufman, L. Researches on the artificial Metamorphosis of Axolotls. Bul. intern. Acad. Krakow **1918** pp. 32–74 2 plates.

Kern, H. *vide* Krüger, P. et Kern.

252.—Kindred, J. E. Ciliogenesis in the esophageal epithelium of the frog tadpole. Anat. Rec. Philadelphia **27** 1924 pp. 183–184.

253.—Kinghorn, J. R. Reptiles and Batrachians from South and South-West Australia. Rec. Austr. Mus. Sydney **14** 1924 163–183 text-figs. 1–10.

254.—Kinghorn, J. R. A short review of the Lizards belonging to the genus *Lialis* Gray. Rec. Austr. Mus. Sydney **14** 1924 pp. 184–188 text-figs. 1–11.

255.—Klaauw, C. V. van der. Bau und Entwickelung der Gehörknöchelchen. Zs. ges. Anat. München (Ergebn. Anat. Entwickl.) **25** 1924 pp. 565–622 1 fig.

256.—Klauber, L. M. Notes on the distribution of snakes in San Diego County, California. Bull. Zool. Soc. San Diego **1** 1924 pp. 1–22 1–5 tables map.

257.—Kolmer, W. et **Koppányi,** T. Ueber die Entwicklung des Pleurodeleshodens und der in ihm auffallenden Zwischenzellenbildungen. Zs. ges. Anat. München **69** 1923 pp. 304–308 2 figs.

258. — Komine, S. Metabolic activities of the nervous system. S., 3. On the regular seasonal changes in the relative weight and the sex difference of the central nervous system of *Rana nigromaculata*. Sci. Rep. Tohoku Imp. Univ. Sendai Japan Bid. Ser. **1** no. **1** 1924 pp. 51–74.

259. — Konopacka, B. Sur les graisses et les lipoïdes dans le développement des embryons de la Grenouille. C.R. soc. biol. Paris **91** 1924 pp. 971–973.

260.—Konopacki, M. Analyse microchimique de la substance périvitelline dans les oeufs de la Grenouille. C.R. soc. biol. Paris **90** 1924 pp. 593–596.

261.—Konopacki, M. Sur le glycogène dans le développement des embryons de la Grenouille. C.R. soc. biol. Paris **91** 1924 pp. 973–975.

262. — Kopeć, S. Experimental studies on the influence of inanition on the development and the weight of Amphibians. Bul. intern. Krakow **1922** pp. 149–171.

263.—Koppányi, T. Erhaltung der Spermatogenese im autophor transplantierten Urodelenhoden. (Zugleich: Versuche zur Biologie des Rippenmolches *Pleurodeles waltli*. Heteroplastische Hodenreplantation.) Arch. mikr. Anat. Entwickl. Berlin **102** 1924 pp. 707–725 8 figs.

264.—Koppányi, T. Versuche zur Biologie des Rippenmolches *Pleurodeles wahlti* Michah. 2. Unabhängigkeit der gelben Seitenflecken vom Rippendruch. Arch. mikr. Anat. Entwickl. Berlin **102** 1924 pp. 726–730.

Koppányi, T. *vide* Kolmer et Koppányi.

Karczewski, W. *vide* Przylecki, S. J. et Karczewski 396.

265.—Kopstein, P. F. Tierbilder aus den Molukken. Nat. Tijdschr. Weltevreden 's Gravenhage **84** 1924 pp. 89–93 1 pl.

266.—Kostir, W. J. An Analysis of the Cranial Ganglia of an Embryo Salamander, *Ambystoma jeffersonianum* (Green). Ohio J. Sci. **24** pp. 230–256 pls. 1–4.

267.—Kraus, R. Das Serotherapeutische Institut in Butantan (São Paulo, Brasilien). Verh. Zool. Bot. Ges. Wien. **73** 1924 pp. (197–198).

268.—Krieg-Tübingen, H. Ueber das geschichtete Plattenepithel. Grundzüge für ein kausales Uerstandnis seiner Organisation. Archiv. mikr. Anat. Entwickl. Berlin **100** 1924 pp. 488–516 13 figs.

269.—Křiženecký, J. Experimentelle Untersuchungen zur Frage nach der Ernährung der Wassertiere durch gelöste Nährstoffe. Zool. Anz. Leipzig **58** 1924 pp. 187–194 5 figs.

270.—Křiženecký, J. Ein Beitrag zur Kenntnis der entwicklungsmecanischen Wirkung des Adrenalins und ihm ähnlicher Stoffe. Arch. mikr. Anat. Entw. Berlin **101** 1924 pp. 558–620 26 figs.

271.—Křiženecký, J. Ueber den Einfluss des Hyperhypophysismus auf das Wachstum, die Entwicklung und Pigmentation der Amphibienlarven. Arch. mikr. Anat. Entw. Berlin **101** 1924 pp. 621–665 6 figs.

272.—Křiženecky, J. et **Podhradský,** J. Studien über die Funktion den im wassergelösten Nährsubstanzen im Stoffwechsel der Wassertiere. I. Die gelösten Substanzen als einzige Nährst offquelle und die Rolle der Kohlenhydrate und Eiweisssubstanzen im Stoffwechsel der Froschkaulquappen. Arch. ges. Physiol. Berlin **203** 1924 pp. 129–140.

273.—Křiženecký, J. et **Podhradský,** J. II. Ueber die Assimilationsfähigkeit der Froschkaulquappen für den Harnstoff. Arch. ges. Physiol. Berlin **204** 1924 pp. 1–24.

274.—Křiženecký, J. et **Podhradský,** J. IV. Zur naheren Kenntnis der wachstumssteigernden Wirkung im Wassergelöster Nährsubstanzen unter normaler Fütterung mit geformter Nahrung. Arch. ges. Physiol. Berlin **204** 1924 pp. 25–41.

275.—Křiženecký, J. et **Podhradský,** J. III. Die Bedeutung des Harnstoffes in der Wachstumsteigernden Wirkung gelöster Nährstoffe unter Ernährung mit geformter Nahrung bei Froschkaulquappen. Arch. ges. Physiol. Berlin **204** 1924 pp. 471–476.

276.—Krüger, P. et **Kern,** H. Die physikalische und physiologische Bedeutung des Pigmentes bei Amphibien und Reptilien. Arch. ges. Physiol. Berlin **202** 1924 pp. 119–138 3 figs.

277.—Krull, W. Observations on *Sphenodon punctatum* in captivity. Iowa Acad. Sci. **30** 1923 pp. 151–155.

278.—Kuhlenbeck, H. Ueber den Ursprung der Basalganglien des Grosshirns. Anat. Anz. Jena **58** 1924 pp. 49–74.

Kuhn, E. *vide* Groebbels and Kuhn.

279.—Kulchitsky, N. Nerve endings in muscles. J. Anat. London **58** 1924 pp. 152–169 4 plates.

280.—Kulchitsky, N. Nerve endings in the muscles of the Frog. J. Anat. London **59** 1924 pp. 1–17 15 figs.

281.—Kuntz, A. An instance of polymely in the Frog. Iowa Acad. Sci. **30** 1923 pp. 157–161 text-figs. 1–4.

282.—Kuntz, A. Anatomical and physiological changes in the digestive system during metamorphosis in *Rana pipiens* and *Amblystoma tigrinum.* J. Morph. Philadelphia **38** 1924 pp. 581–598 text-figs. 1–12.

283.—Lambe, L. M. On *Eoceratops candensis,* gen. nov., with remarks on other genera of Cretaceous Horned Dinosaurs. Canada Geol. Surv. Mus. Bul. **12** 1915.

284.—Landacre, F. L. The primitive lines of *Amblystoma.* Anat. Rec. Philadelphia **27** 1924 p. 207–208.

285.—Lang, H. Into the Interior of British Guiana. Nat. Hist. New York **24** 1924 p. 478 photo.

286.—Lange, D. de. Die Bildung der Fötalanhänge und der Placenta bei den Amnioten. Anat. Anz. Jena **58** 1924 pp. 287–303 6 figs. (references to Batrachia).

287.—Lantz, L. A. Révision des Reptiles decrits dans le "Journal de Voyage" d'Iwan Lepechin. Bul. soc. zool. France Paris **47** 1922 pp. 191–194.

288.—Lantz, L. A. Note sur la Caméléon vulgaire et sa reproduction en captivité. Rev. Hist. Nat. appl. **5** (1) 1924 p. 1.

289.—Lantz, L. A. Mantes et Lézards. Rev. Hist. Nat. appl. Paris **5** 1924 pp. 281–284 pl. 6.

290.—Lantz, L. A. Quelques données récentes sur l'Herpétologie du nord-est et de l'Est de la France. Rev. Hist. Nat. appl. **5** (3) 1924 pp. 76–86.

291.—Lantz, L. A. et **Cyrén,** O. Note sur les *Lacerta viridis* du Caucase. Bul. soc. zool. France Paris **45** 1920 pp. 33–37.

292.—Lapicque, L. et M. Chronaxie des vaisseaux et des cellules pigmentaires chez la Grenouille. C.R. Soc. biol. Paris **91** 1924 pp. 267–269.

293.—Larsell, O. The nucleus isthmi of the Frog. J. Comp. Neur. Philadelphia **36** 1924 pp. 309–322 9 figs.

294.—Latimer, H. B. The weight of the brain and its parts, and the spinal cord in the frog, turtle and dog. Anat. Rec. Philadelphia **27** 1924 p. 208.

295.—Latimer, H. B. The weight of the brain, of its parts and of the spinal cord of the Frog, Turtle and Dog. J. Comp. neur. Philadelhpia **38** 1924 pp. 49–71.

Laurens, H. *vide* Crofts and Laurens.

296.—Lebedinsky, N. G. Entwicklungsmechanische Untersuchungen an Amphibien. 1. Eine neue Methode zum Erzielen nervenloser Extremitätentransplantate bei Anurenlarven. Arch. mikr. Anat. Entwickl. Berlin **102** 1924 pp. 101–112 11 figs.

297.—Leblanc, E. Les muscles orbitaires des reptiles. Étude des muscles chez *Chameleon vulgaris*. C.R. Acad. Sci. Paris **179** 1924 pp. 996–998.

Lepkovsky, S. *vide* Pearse, A. S.

298.—Lindholm, W. A. A forgotten description of a North American Frog. Copeia Northampton U.S.A. **129** 1924 pp. 46–47.

299.—Loeb, J. Further observations on the production of parthenogenetic Frogs. J. Gen. Physiol. Baltimore **3** 1921 pp. 539–545.

300.—Longman, H. A. Some Queensland fossil vertebrates. Mem. Queensland Mus. **8** 1924 pp. 16–28 (Reptiles pp. 23–28 1 pl. 2 figs.).

301.—Loveridge, A. Check List of the Reptilia recorded from the British Territories in East Africa. J. E. Africa & Uganda Nat. Hist. Soc. Nairobi 1924 special supplement **3** pp. 1–16.

302.—Loveridge, A. A new Snake of the genus *Lampropeltis*. Occ. paprs. Soc. Nat. Hist. Boston **5** 1924 pp. 137–139.

303.—Lumsden, T. Chelonian respiration (Tortoise). J. Physiol. Cambridge **58** 1924 pp. 259–266 figs. 1–3.

304.—Lutz, A. Sur les *Leptodactylus* du Brésil. C.R. soc. biol. Paris **90** 1924 pp. 235–236.

305.—Lutz, A. Sur les Rainettes des environs de Rio de Janeiro. C.R. soc. biol. Paris **90** 1924 p. 241.

306.—McCann, C. A note on the habits of the Large-scaled Earth-snake *Silybura macrolepis*. J. Bombay Nat. Hist. Soc. **29** 1924 pp. 1062–1063 fig. 18.

307.—McCarrison, R. The effects of the excess-ingestion of certain amino-acids on the growth, metamorphosis and thyroid gland of Tadpoles. Ind. J. Med. Res. Calcutta **11** 1924 pp. 1131–1136 1 pl.

308.—McCreight, J. Regeneration of the spinal cord in the tail of *Diemyctylus viridescens*. Anat. Rec. Philadelphia **27** 1924 p. 210.

McGowan, F. *vide* Uhlenhuth, E.

309.—Mainx, F. Versuche ueber die Beeinflussung der Mitose durch Giftstoffe. Zool. Jahrb. Jena Abt. 3 für all Zool. **41** 1924 pp. 553–577.

310.—Maki, S. Untersuchungen über das Hautsekret von *Triton taeniatus* (Kleiner Wassermolch). Arch. exper. Path. Leipzig **104** 1924 pp. 100–114.

Mangold, H. *vide* Spemann et Mangold.

311.—Marcucci, E. La morfologia del bacino dei Sauropsidi. Il pube degli Uccelli. Boll. soc. nat. Napoli **35** 1923 pp. 159–190 10 figs.

312.—Marcus, H. Ueber den Uebergang von der Wasser- zur Luftatmung mit besonderer Berücksichtigung des Atemmechanismus von *Hypogeophis*. Beitrag zur Kenntnis der Gymnophionen No. 6. Zs. ges. Anat. München **69** 1923 pp. 328–343 12 figs.

313.—Mariani, E. Su un nuovo Esemplari di *Lariosaurus balsami* Cur., trovato negli scisti di Perledo sopra Varenna (Lago di Como). Atti soc. ital. sci. nat. Milano **62** 1924 pp. 218–225.

314.—Martiis, L. C. de. Sulla struttura dell'epidermide in varie regioni del corpo della larva di *Salamandra maculosa.* Natura Milano **15** 1924 pp. 22–24.

315.—Maschkowzeff, A. Entwicklung des urogenital Systems bei den Knorpelganoiden und einigen anderen Wirbeltieren. Anat. Anz. Jena **59** 1924 pp. 81–93 6 figs.

316.—Matthes, E. Die Rolle des Gesichts-, Geruchs- und Erschatterungssinnes für den Nahrungserwerb von *Triton.* Biol. Centralbl. Leipzig **44** 1924 pp. 72–86.

317.—May, R. M. Skin grafts in the Lizard, *Anolis carolinensis* Cuv. Brit. J. Exper. Biology **1** 1924 pp. 539–555 text-figs. 1–7 2 pls.

318.—Mazza, S. On the action of the poison of the Viper and the Cobra on the Caterpillar of *Galleria mellonella.* J. Trop. Med. London **27** 1924 pp. 109–110.

319.—Mazza, S. Sur l'action des venins de vipère et de Cobra sur les chenilles de *Galleria mellonella.* C.R. soc. biol. Paris **90** 1924 pp. 669–671.

320.—Méhely, A. L. Reptilia et Amphibia. Fauna Regni Hungariae Budapest 1918 pp. 1–12.

321.—Mertens, R. Ein neuer Gecko aus Mesopotamien. Senckenb. Frankfurt **6** 1924 p. 84.

322.—Mertens, R. Herpetologische Mitteilungen. Senkenberg Frankfurt **6** 1924 pp. 177–185.

323.—Mertens, R. Ueber einige Reptilien aus Borneo. Zool. Anz. Leipzig **60** 1924 pp. 155–159.

324.—Mertens, R. Ein Beitrag zur Kenntnis der melanotischen Inseleidechsen des Mittelmeeres. Pallasia **2** 1924 pp. 40–52.

325.—Mertens, R. Ueber die Reptilien- und Amphibien-Sammlung des Zoologischen Gartens in London. Pallasia **2** 1924 pp. 67–72.

326.—Mertens, R. Amphibien und Reptilien aus dem nördlichen Mesopotamien. Abh. Mus. Natk. Magdeburg **3** 1924 pp. 349–390 2 text-figs. 1 pl.

327.—Metcalf, M. M. The opalinid parasites and the geographical distribution of the bell-toads (Discoglossidae). Anat. Rec. Philadelphia **29** 1924 p. 119.

328.—Milojevic, B. D. Beiträge zur Frage über die Determination der Regenerate. Arch. mikr. Anat. Entwickl. Berlin **103** 1924 pp. 80–94 10 figs.

329.—Miranda-Ribeiro, A. de. As Phyllomedusas do Museo Paulista. Bol. Mus. Nacion. Rio de Janeiro **1** 1923 pp. 3–6.

330.—Miranda-Ribeiro, A. de. Notas Batrachologicas. Bol. Mus. Nacion. Rio de Janeiro **1** 1924 pp. 137–143 text-fig. tables.

331.—Miranda-Ribeiro, A. de. De Batrachorum generos speciebusque duobus in collectio Musei Nationalis servatis. Bol. Mus. Nacion. Rio de Janeiro **1** 1924 pp. 255–257 fig.

332.—Mole, R. R. The Trinidad snakes. Proc. Zool. Soc. London **1924** pp. 235–278 pls. i–x.

333.—Monroe, W. M. An efficient Turtle trap for protection of Gambusia in hatcheries, ponds, etc. Amer. J. Tropical Med. Baltimore **4** 1924 pp. 195–198 1 fig.

Moore, J. *vide* Coghill, G. E.

334.—Müller, L. Neue Batrachier aus Ost-Brazilien. Senkenberg. Frankfurt **6** 1924 pp. 169–177.

335.—Müller, L. Beiträge zur Osteologie der rezenten Krokodilier. Zs. Morph. Ökol. Berlin **2** 1924 pp. 427–460.

336.—Müller, L. Ueber neue oder seltene Mittetl und südamerikanische Amphibien und Reptilien. Mitl. zool. Mus. Berlin **11** 1924 pp. 75–93.

337.—Müller, L. Ueber ein neues Chamaeleon aus Madagascar. Mitt. Zool. Mus. Berlin **11** 1924 pp. 95–96.

338.—Müller, L. Neue oder seltene Reptilien und Batrachier der Zoologischen Sammlung der Bayerischen Staates. Zool. Anz. Leipzig **58** 1924 pp. 291–297.

339.—Müller, L. Zur Nomenklatur der südamerikanischen Kaiman-Arten. Zool. Anz. Leipzig **58** 1924 pp. 314–319.

340.—Müller, L. Neue Laubfrösche aus dem Staate Santa Catherina, S.O. Brazilien. Zool. Anz. Leipzig **59** 1924 pp. 233–238.

Muratet, L. *vide* Sabrazès, J.

341.—Murray, P. D. F. The motor nerve-endings of the limb muscles of the Frog (*Rana temporaria*) and of the muscles of the Pectoral fin of the Dog-Fish. Proc. Linn. Soc. New. S. Wales Sydney **49** 1924 pp. 371–385.

342.—Myers, G. S. Amphibians and Reptiles from Wilmington N. C. Copeia Northampton U.S.A. **131** 1924 pp. 59–62.

343.—Naville, A. Le milieu interne de l'adulte a-t-il une influence sur la régénération des tissus larvaires chez les Amphibiens anoures ? C.R. Phys. Hist. Nat. Genève **41** 1924 pp. 17–20.

344.—Naville, A. Recherches sur l'histogenèse et la régénération chez les Batraciens Anoures (corde dorsale et téguments). Arch. biol. Liège-Paris **34** 1924 pp. 235–344 pls. 6–7 text-figs. 1–26.

345.—Neal, H. V. A case of unilateral or true gynandromorphism in a Leopard Frog. Anat. Rec. Philadelphia **29** 1924 p. 115.

346.—Nesterov, P. V. Trois formes nouvelles d'Amphibies (Urodela) du Kurdistan. Ann. Mus. zool. Acad. Petrograd **21** 1916 pp. 1–30 3 plates & 6 figs. [In Russian.]

347.—Nicholas, J. S. Ventral and dorsal implantations of the limb bud in *Amblystoma punctatum.* J. Exper. Morph. Philadelphia **39** 1924 pp. 27–38 2 plates.

348.—Nicholas, J. S. Regulation of posture in the fore limbs of *Amblystoma punctatum.* J. exp. zool. Philadelphia **40** 1924 pp. 113–159 30 figs.

349.—Nicholas, J. S. The development of the balancer in *Amblystoma tigrinum.* Anat. Rec. Philadelphia **28** 1924 pp. 317–324 pls. i–ii.

350.—Nikolsky, A. M. Faune de la Russie. Reptiles vol. **1** Petrograd **1915** *Chelonia* et *Sauria* pp. 1–532 pls, i–ix text-figs. 1–69. [In Russian.]

351.—Nikolsky, A. M. Faune de la Russie. Reptiles vol. **2** Petrograd **1916** *Ophidia* pp. 1–349 pls. i–vii text-figs. 1–64. [In Russian.]

352.—Nikolsky, A. M. Faune de la Russie. *Amphibia.* Petrograd **1918** pp. 1–309 pls. i–iv text-figs. 1–62. [In Russian.]

353.—Noble, G. K. A new Spadefoot Toad from the Oligocene of Mongolia with a summary of the evolution of the Pelobatidae. Amer. Mus. Novit. New York no. **132** 1924 pp. 1–15 text-figs. 1–7.

354.—Noble, G. K. Some Neotropical Batrachians preserved in the United States National Museum with a note on the secondary sexual characters of these and other Amphibians. Proc. Biol. Soc. Washington **37** 1924 pp. 65–72.

355.—Noble, G. K. New Lizards from Northwestern Peru. Occ. Pprs. Boston Soc. Nat. Hist. **5** 1924 pp. 107–113.

356.—Noble, G. K. Contributions to the Herpetology of the Belgian Congo based on the collection of the American Museum Congo Expedition, 1909–1915. Bull. Amer. Mus. Nat. Hist. New York **49** 1924 pp. 147–347 pls. xxiii–xlii text-figs. 1–8.

357.—Noble, G. K. The "retrograde metamorphosis" of the Sirenidae; experiments on the functional activity of the thyroid of the perennibranchs. Anat. Rec. Philadelphia **29** 1924 p. 100.

358.—Noble, G. K. The integumentary, pulmonary and cardiac modifications correlated with increased cutaneous respiration in the amphibia. Anat. Rec. Philadelphia **29** 1924 pp. 110–111.

Noble, G. K. *vide* Gregory, W. K.

Noble, G. K. *vide* Taylor, E. H.

359.—Nogaki, S. Ueber den Einfluss der Ausschaltung der Hypophyse und der Nebennieren auf die Erregbarkeit der Froschgefässe. Arch. exper. Path. Leipzig **103** 1924 pp. 147–162.

360.—Nopcsa, F. Bemerkungen und Ergänzungen zu G. v. Arthaber's Arbeit über Entwicklung und Absterben der Pterosaurier. Palaeont. Zs. Berlin **6** 1924 pp. 80–91.

361.—Nopcsa, F. Über die Namen einiger brazilianischer fossiler Krokodile. Centralbl. Min. Geol. Paläont. Stuttgart **1924** p. 378.

362.—Notkin, L. J. Some facts concerning the spindle-cells of Frog's blood. Q. J. Exper. Physiol. London **14** 1924 pp. 84–98 6 figs.

363.—Obreshkove, V. Accessory testicular lobes in *Diemyctylus viridescens*, their probable origin and significance. J. Morph. Philadelphia **39** 1924 pp. 1–38 19 figs.

364.—Oertel, W. Die Schildkrötenfauna des nordwestdeutschen oberen Jura. Palaeont. Zs. Berlin **6** 1924 pp. 43–79 text-figs. 1–17.

365.—Ohno, M. Erfahrungen über die Wirkung von "Schilddrüsenextrakten" auf Herz und Darm des Kaltblüters. Zs. Biol. München **81** 1924 pp. 113–124.

366.—Okamoto, H. Ueber die Mitochondrien der Leber und Niere bei den Februar- und Maifröschen. Arch. path. Anat. Berlin **250** 1924 pp. 275–295.

367.—Osborn, H. F. The Discovery of an unknown continent. Nat. Hist. New York **24** 1924 pp. 133–149 photos.

368.—Ott, M. D. Changes in the weights of the various organs and parts of the Leopard Frog (*Rana pipiens*) at different stages of inanition. Amer. J. Anat. Philadelphia **33** 1924 pp. 17–56 14 figs.

369.—Over, W. H. Amphibians and Reptiles of South Dakota. S. Dakota Geol. Nat. Hist. Surv. Bull. **12** 1923 pp. 1–34 pls. i–xviii.

Ozorio de Almeida, M. *vide* Almeida M. O. de.

370.—Parker, H. W. Description of a new Anguid Lizard from Brazil. Ann. Mag. Nat. Hist. London ser. 9 **13** 1924 pp. 586–587 fig.

371.—Parker, H. W. Description of a new Agamid Lizard from Sumatra. Ann. Mag. Nat. Hist. (ser. 9) **14** 1924 pp. 624–625.

372.—Parks, W. A. *Dyoplosaurus acutosquameus*, a new genus and species of armoured Dinosaur; and notes on a skeleton of *Prosaurolophus maximus*. Univ. Toronto Studies Geol. Series **18** 1924 pp. 1–35 5 plates.

373.—Patch, C. L. and **Stewart,** D. A. —The Tiger Salamander at Ninette, Manitoba. Canad. Field. Nat. Ottawa **38** 1924 pp. 81–82 1 fig.

374.—Pauli, W. E. et **Hartmann,** A. Ueber die Wirkung von Kathodenstrahlen auf lebendes Gewebe. Arch. mikr. Anat. Entwickl. Berlin **103** 1924 pp. 95–167 28 figs.

Peabody, E. B. *vide* Wilder et Peabody.

375.—Pearse, A. S. et **Lepkovsky,** S. The growth of turtles fed on rations of pure foods. Anat. Rec. Philadelphia **29** 1924 p. 126.

376.—Pearson, H. S. The skull of the Dicynodent Reptile *Kannemeyeria*. Proc. Zool. Soc. London **1924** pp. 793–826 text-figs. 1–18.

377.—Pearson, H. S. A Dicynodont Reptile reconstructed. Proc. Zool. Soc. London **1924** pp. 827–855 text-figs. 19–39.

378.—Pellegrin, J. Batrachiens et Poissons du Sud-Est du Maroc et du Sud-Oranais. Bul. Muséum Paris **30** 1924 pp. 178–179.

379.—Peter, K. Zur Histophysiologie der Amphibienniere. Zs. ges. Anat. München **73** 1924 pp. 145–167 9 figs.

380.—Peterson, W. Dinosaur tracks in the roofs of coal mines. Nat. Hist. New York **24** 1924 pp. 388–391 photos.

381.—Phisalix, M. Variations observées dans le revêtement écailleux de la tête chez la Vipère *aspis*; Comparaison avec la Vipère *berus* et la Coulouvre vipérine. Bul. Muséum Paris **30** 1924 pp. 263–268 1 fig.

382.—Phisalix, M. Le venin cutané granuleux de l'Euprocte spécial aux Pyrénées, *Molge aspera* Dugès. Bul. Muséum Paris **30** 1924 pp. 351–354.

Pieron, H. *vide* François, M.

383.—Pinney, E. An abnormal relation of the iliac artery to the sciatic plexus in the frog. Anat. Rec. Philadelphia **28** 1924 pp. 391–392 fig.

384.—Piveteau, J. L'Arrière-Crane d'un Dinosaurien carnivore de l'Oxfordien de Dives. Ann. Pal. (Boule) Paris **12** 1923 pp. 1–11.

385.—Podhradský, J. Das Wachstum beim absoluten Hungern. Arch. Entw. Mech. Berlin **52** 1923 pp. 532–549.

Podhradský, J. *vide* Kříženecký, J. et Podhradský, 272–275.

386.—Police, G. Sui rapporti fra le fibre radiali e gli elementi visivi nella retina di Axolotl di *Amblystoma mexicanus*. Boll. soc. nat. Napoli **33** 1922 for 1920 pp. 92–97.

Politzer, G. *vide* Alberti et Politzer.

387.—Ponse, K. L'Organe de Bidder et le déterminisme des caractères sexuels secondaires du Crapaud (*Bufo vulgaris* L.). Rev. Suisse zool. Genève **31** 1924 pp. 177–336 3 pls. 14 figs.

388.—Pope, C. H. Notes on North Carolina Salamanders with especial reference to the egg-laying habits of *Leurognathus* and *Desmognathus*. Amer. Mus. Novit. New York No. **153** 1924 pp. 1–15 figs. 1–2.

389.—Pope, P. H. The Life-history of the common Water-newt (*Notophthalmus viridescens*), together with observations on the sense of smell. Ann. Carnegie Mus. Pittsburg **15** 1924 pp. 305–362 pls. xli–li.

390.—Prater, S. H. The Snakes of Bombay Island and Salsette. J. Bombay Nat. Hist. Soc. **30** 1924 pp. 151–176 pls. i–iv 1 text-fig.

391.—Pravoslavlev, P. A. Sur la question du cingulum extremitatis thoracicae d'*Elasmosaurus* Cope. Bull. Acad. Sci. Russ. Petrograd 1916 pp. 327–342 1 plate. [Russian].

392.—Pravoslavlev, P. A. On the geological distribution of Elasmosauria. [In Russian.] Bull. Acad. Sci. Russ. Petrograd **1918** (1919) pp. 1955–1978 & 2325–2343.

393.—Procter, J. B. Description of a new *Typhlops* from S. India and notes on *Brachyophidium* and *Platyplectrurus*. Ann. Mag. N. H. London ser. 9 **13** 1924 pp. 139–142 figs. 1–2.

394.—Procter, J. B. Unrecorded characters seen in living Snakes and description of a new Tree-Frog. Proc. Zool. Soc. London **1924** pp. 1125–1129 pls. i–iii.

395.—Proebsting, G. Zellenzahl und Zellgrösse im Labyrinthorgan der Tritonen, nebst anderen damit zusammenhängenden Fragen. Zool. Jahrb. Jena **41** 1924 pp. 425–488 14 figs.

396.—Przylecki, S. J. et **Karczewski,** W. La métabolisme protéique chez les Grenouilles à jeun et après une nourriture hydrocarbonée. Arch. internat. Physiol. Liège-Paris **22** 1923 pp. 208–218.

397.—Przylecki, S. J. Propriétes digestives de la peau des Grenouilles. Arch. internat. Physiol. Liège-Paris **22** 1923 pp. 220–224.

398.—Przylecki, S. J. L'Absorption cutanée chez les Grenouilles. Arch. internat. Physiol. Liège-Paris **23** 1924 pp. 97–120.

399.—Przylecki, S. J. La dégradation des protéins chez les Grenouilles après extirpation du foie. Arch. internat. Physiol. Liège-Paris **24** 1924 pp. 27–40 & id. p. 112.

400.—Przibram, H. Die virtuelle und reelle Lage des Amphibienembryos nach natürlichen und künstlichen Marken am Ei des Alpenmolches, *Triton alpestris*. Arch. mikr. Anat. Entwickl. Berlin **102** 1924 pp. 584–603 2 plates 1 fig.

401.—Przibram, H. Achsenverhältnisse und Entwicklungspotenzen der Urodelenextremitäten an Modellen zu Harrison's Transplantationsversuchen. Arch. mikr. Anat. Entwickl. Berlin **102** 1924 pp. 604–623 21 figs.

402.—Rabbeno, A. Sull'Azione della tiroide sul cuore e sul sistema nervoso della *Rana*, isolati dell'organismo. Arch. fisiol. Firenze **22** 1924 pp. 37–59.

403.—Ranzi, S. La chiusura dell' otocisti, lo sviluppo del ductus endolymphaticus (o recessus labyrinthi ovvero aquaeductus vestibuli) e la sua omologia nella serie dei Vertebrati. Att. R. Accad. Naz. Linc. Roma **33** 1924 pp. 448–455.

404.—Ranzi, S. L'accrescimento in superficie e l'accrescimento in volume durante lo sviluppo dell'otocisti del *Bufo*. Atti acc. Lincei Roma **33** 1924 pp. 522–524.

405.—Rao, Y. R. A note on cannibalism in a Gecko. J. Bombay Nat. Hist. Soc. **30** 1924 pp. 228–229.

406.—Rau, A. S. Observations on the anatomy of the heart, lungs and related parts of *Ceratophrys*. J. Anat. London **58** 1924 pp. 306–327 10 figs.

407.—Rau, A. S. Observations on the anatomy of the heart of *Tiliqua scincoides* and *Eunectes murinus.* J. Anat. London **59** 1924 pp. 60–71 3 figs.

408.—Reese, A. M. Cephalic glands in snakes and alligators. Anat. Rec. Philadelphia **29** 1924 p. 111.

409.—Reese, A. M. The structure and development of the intromittent organ of the Crocodilia. J. Morph. Philadelphia **38** 1924 pp. 301–314 pls. i–iii.

410.—Reis, K. Sur le comportement des greffes de la peau, dans la queue du Têtard, pendant la métamorphose. C.R. Soc. biol. Paris **91** 1924 pp. 701–702

411.—Rĭabinin, A. H. Fossil Tortoises from Bessarabia (in Russian). Trav. Mus. Geol. Min. Emp. P. le G. près l'Acad. Sci. Russ. Petrograd **1915** (1918) pp. 1–16 5 plates 2 text-figs.

412.—Rĭabinin, A. H. Note sur un Pélycosaurien des depôts permo-carbonifères de l'Oural. Bull. Com. Géol. Pétrograd **34** 1915 pp. 385–395 [Russian; resumé in French].

413.—Rĭabinin, A. H. Moule interne du crâne de *Melosaurus uralensis* H. von Meyer. Bull. Com. Géol. Pétrograd **35** (6) 1916 pp. 615–626 pl. xvi [Russian ; French resumé].

414.—Rodda, A. E. The Eastern Water-Dragon, *Physignathus lesuerii.* Vict. Nat. Melbourne **41** 1924 pp. 157–158.

415.—Rogers, A. F. Mineralogy and Petrography of fossil bone. Bull. Geol. Soc. Amer. New York **35** 1924 pp. 535–554 pls. xxvi–xxix.

416.—Rollinat, R. Le dressage du Lézard des Souches en cage et en liberté dans un jardin. Bull. Soc. Nation. Accl. France Paris **71** 1924 pp. 11–12.

417.—Romeis, B. Histologische Untersuchungen zur Analyse der Wirkung der Schilddrüsenfütterung auf Froschlarven. 2. Die Beeinflussung der Entwicklung der vorderen Extremität und des Brustschultersapparates. Arch. mikr. Anat. Entw. Berlin **101** 1924 pp. 382–436 21 figs.

418.—Romer, A. S. Pectoral limb musculature and shoulder-girdle structure in Fish and Tetrapods. Anat. Rec. Philadelphia **27** 1929 pp. 119–143 figs. 1–10.

419.—Romer, A. S. The lesser trochanter of the mammalian femur. Anat. Rec. Philadelphia **28** 1924 pp. 95–102 text-figs. 1–3.

420.—Rose, M. Localisation histologique dans le cerveau antérieur des crocodiles. Bul. intern. Acad. Krakow **1919 B** pp. 232–249 3 plates.

421.—Rosenkrantz, A. En *Trionyx* fra Craniakalk-Blokke i København. (A *Trionyx* from Crania limestone-boulders in Copenhagen ; English Summary). Medd. Geol. Kjøbenhavn **6** (19) 1923 pp. 1–14 3 figs.

422.—Rostand, J. Parthenogenèse traumatique par le sperme sec. C.R. soc. biol. Paris **90** 1924 p. 931.

423.—Röthig, P. Beiträge zum Studium des Zentralnervensystems der Wirbeltiere. Zs. mikr. anat. Forsch. (Abt. 2 of Morph. Jahrb.) Leipzig **1** 1924 pp. 5–40 35 figs.

424.—Roux, J. Notice historique sur la collection erpétologique du Museum d'Histoire naturelle de Bâle. Verh. Natf. Ges. Basel **35** 1924 pp. 60–70.

425.—Rubner, M. Aus dem Leben des Kaltblüters. 2. Amphibien und Reptilien. Biochem. Zs. Berlin **148** 1924 pp. 268–307.

426.—Rubner, M. Ueber die Bildung der Körpermasse im Tierreich und die Beziehung der Masse zum Energieverbrauch. Sitzber. Ak. Wiss. Berlin **1924** pp. 217–234.

Russo, P. *vide* Depéret, C.

427.—Rylkoff, H. Die Entwicklung der Schultermuskeln bei urodelen Amphibien. Zs. wiss. zool. Leipzig **122** 1924 pp. 116–171 28 figs.

428.—Sabrazès, J. et **Muratet,** L. Examen du sang d'un Caméléon tunisien. C.R. soc. biol. Paris **90** 1924 pp. 1044–1046.

429.—Sabrazès, J. et **Muratet,** L. Les globules blancs du sang de *Lacerta muralis* a l'état normal et pathologique. C.R. soc. biol. Paris **91** 1924 pp. 44–46.

430.—Sato, K. Ueber die Metamorphose von *Bufo vulgaris japonica.* Zs. ges. Anat. München **71** 1924 pp. 41–184 37 figs.

431.—Schiller, I. Vererbung und Immunität. Arch. mikr. Anat. Entwickl. Berlin **103** 1924 pp. 182–205.

432.—Schlesinger, B. Die Histogenese des mesodermalen Oesophagus und Magens beim Gecko (*Platydactilus annularis*). Zs. Ges. Anat München **73**. 1924 pp. 606–620 7 figs.

433.—Schlosser, M. Tertiary Vertebrates from Mongolia. Palaeont. Sin. Geol. Surv. China Peking ser. C **1** 1924 p. 96.

Schlüns, O. *vide* Groebbels.

434.—Schmidt, K. P. The American Alligator. Field Mus. Nat. Hist. zool. leaflet Chicago **1922** (3) pp. 1–14 photos. figs. 1–3.

435.—Schmidt, K. P. Notes on Central American Crocodiles. Field Mus. Nat. Hist. Publ. zool. ser. **12** 1924 pp. 1–92 pls. v–ix.

436.—Schmidt, K. P. Emory's Soft-shelled Turtle in Arizona. Copeia Northampton U.S.A. **131** 1924 p. 64.

437.—Schmidt, K. P. A List of Amphibians and Reptiles collected near Charleston S.C. Copeia Northampton U.S.A **132** 1924 pp. 67–69.

438.—Schneider, C. O. Contribución a la Palæontologia Chilena. Apuntes sobre el *Cimoliasaurus andium* Deecke. Rev. Chilena Hist. Nat. Santiago **25** 1921 pp. 89–95 figs. 1–5.

439.—Schneider, R. Das Gesetz vom Eisen in Zähnen und andern Knochengebilden der Fische und Amphibien. Arch. Natg. Berlin Abt. A **90** (4) 1924 pp. 49–58.

440.—Schotté, O. Le grand sympathique est le seul facteur nerveux dans la régénération des membres de Tritons. C.R. Phys. Hist. Nat. Genève **41** 1924 pp. 45–52.

441.—Schreitmüller, W. Beiträge zur Fauna Nord- und Nordostfrankreichs und der angrenzenden Gebiete Belgiens. Arch. Natg. Berlin **89** A 1923 pp. 119–190 text-figs.

442.—Schubert, M. Untersuchungen über die Rückbildungserscheinungen der Epidermis des Froschlarvenschwanzes. Anat. Anz. Jena **58** 1924 pp. 257–269.

443.—Schulze, W. Weitere Untersuchungen über die Wirkung inkretorischer Drüzensubstanzen auf die Morphogenie. III. Ueber die Sprengung der Harmonie der Entwicklung. Arch. mikrosk. Anat. Entw. Berlin **101** 1924 pp. 338–381 27 figs.

444.—Schwartz, A. and **Bricka,** M. L'action de l'insuline sur la glycémie, l'état général et le glycogène hepatique des Grenouilles. C.R. soc. biol. Paris **91** 1924 pp. 1428–1430.

445.—Sembrat, K. Recherches expérimenta les sur les facteurs provoquant la métamorphose de l'intestin chez les têtards des Anoures. (*Pelobates fuscus* Lam.) C.R. soc. biol. Paris **90** 1924 pp. 894–896.

446.—Schafer, G. D. Respiratory exchange of the Frog. Science New York **60** 1924 pp. 179–181 1 fig.

447.—Shaner, R. F. On the muscular architecture of the ventricles of the Alligator heart. Anat. Rec. Philadelphia **29** 1924 pp. 21–32 text-figs. 1–6.

448.—Siebenrock, F. Die nearktischen *Trionychidae*. Verh. Zool. Bot. Ges. Wien **73** 1924 pp. 180–194.

449.—Siedlecki, M. Ueber die lymphatischen Gefässe in den Flughauten der fliegenden Drachen. Bul. intern. Acad. Krakow 1915 pp. 26–36 1 plate.

450.—Simôes-Raposo, L. La formation, la croissance et la régénération de la moelle caudale chez les Pleurodèles (embryons et adultes). C.R. soc. biol. Paris **90** 1924 pp. 1093–1095.

451.—Sinclair, W. J. The Faunas of the concretionary zones of the Oreodon Beds, White River Oligocene. Proc. Amer. Phil. Soc. **63** 1924 pp. 92–133 (Reptiles, pp. 132–133).

452.—Skowron, S. Ueber die Sekretionsvorgänge in den Epithelzellen der Schilddrüse bei Urodelen. Bul. intern. Krakow **1922** pp. 185–189 1 pl.

453.—Smith, M. A. New Tree-Frogs from Indo-China and the Malay Peninsula. Proc. Zool. Soc. London **1924** pp. 225–234 pls. 1–3 1 text-fig.

454.—Smith, M. A. Descriptions of Indian and Indo-Chinese Tadpoles. Rec. Ind. Mus. Calcutta **21** 1924 pp. 137–143 1 pl.

455.—Smith, M. A. The Tadpole of *Tylotriton verrucosus* Anderson. Rec. Ind. Mus. Calcutta **26** 1924 pp. 309–310 pl. 20.

456.—Smith, M. A. Two Lizards and a new Tree-Frog from the Malay Peninsula. J. Fed. Malay Mus. Kuala Lampur **11** 1924 pp. 183–186 2 figs.

457.—Smith, P. E. et **Graesser,** J. B. A differential response of the melanophore stimulant and oxytocic autocoid of the posterior hypophysis. Anat. Rec. Philadelphia **27** 1924 p. 187.

458.—Spaul, E. A. Accelerated metamorphosis of Frog Tadpoles by injections of extract of anterior lobe pituitary gland and the administration of iodine. Brit. J. Exper. Biol. **1** 1924 pp. 313–321.

459.—Spaul, E. A. Experiments on the injection of Pituitary Body (Anterior Lobe) Extracts to Axolotls. Brit. J. Exp. Biol. Edinburgh **2** 1924 pp. 33–55 tables.

460.—Speck, F. G. A Note on the Breeding Habits of *Sceloporus*. Copeia Northampton U.S.A **128** 1924 pp. 35–36.

461.—Speck, F. G. Intelligence Behaviour in Lizards. Canad. Field Nat. Ottawa **38** 1924 pp. 47–48.

Speidel, C. C. *vide* Jordan, H. E.

462. — Speidel, C. C. Endocrine glands and bilateral symmetry. Anat. Rec. Philadelphia **29** 1924 p. 102.

463.—Speidel, C. C. et **Dickey,** A. B. A study of the changes in the epithelial surfaces of the frog larva during thyroid - accelerated metamorphosis. Anat. Rec. Philadelphia **27** 1924 pp. 187–188.

464.—Spemann, H. et **Mangold,** H. Ueber Induktion von Embryonalanlagen durch Implantation artfremder Organisatoren. Arch. mikrosk. Anat. Entwickl. Berlin **100** 1924 pp. 599–638 25 figs.

465.—Ssyssojew, T. Histologische Beobachtungen am intravital gefärbten Axolotl. Arch. path. Anat. Berlin **251** 1924 pp. 150–155 3 figs.

466.—Stadtmüller, F. Studien am Urodelenschädel.. 1. Zur Entwicklungsgeschichte des Kopfskeletts der *Salamandra maculosa*. Zs. ges. Anat. München **75** 1924 pp. 149–225 41 figs.

Steichen, A. *vide* Caius and Steichen.

467.—Stejneger, L. Herpetological novelties from China. Occ. Papers Bost. Soc. Nat. Hist. Boston **5** 1924 pp. 119–121.

468.—Stejneger, L. The Wood-Frogs of Japan. Proc. Biol. Soc. Washington **37** 1924 pp. 73–78.

469.—Stejneger, L. A new Chinese Lizard of the genus *Eumeces*. Journ. Acad. Sci. Washington **14** 1924 pp. 383–384.

470.—Sternberg, H. Ueber Transplantation des Ohrbläschens bei Froschlarven. Arch. mikr. Anat. Entwickl. Berlin **103** 1924 pp. 259–283 18 figs.

Sternbrg, H. *vide* Eisinger et Sternberg.

471.—Stevenson, E. et **Coghill,** G. E. Individual differences in proliferation of cells in the brain of *Amblystoma*. Anat. Rec. Philadelphia **27** 1927 pp. 165–174 12 figs.

Stewart, D. A. *vide* Patch and Stewart.

472.—Stieve, H. Die Gliedmassenentwicklung der Zauneidechse (*Lacerta agilis*). Zs. mikrosk. anat. Forsch. (Abt. 2 of Morph. Jahrb.) Leipzig **1** 1924 pp. 391–436 4 plates 30 figs.

473.—Stiles, C. W. Nomina conservanda. Science New York **60** 1924 pp. 384–385 (Batrachia Reptilia p. 385). Also in Nature London **114** 1924 p. 382 and in Monitore Zool. ital. Siena **35** 1924 p. 240.

474.—Stöhr, P., jr. Experimentelle Studien an embryonalen Amphibienherzen. 1. Ueber Explantation embryonal Amphibienherzen. Arch. mikr. Anat. Entwickl. Berlin **102** 1924 pp. 426–451.

475.—Stöhr, P., jr. Experimentelle Studien an embryonalen Amphibienherzen. 2. Ueber Transplantation embryonaler Amphibienherzen. Arch. mikr. Anat. Entwickl. Berlin **103** 1924 pp. 555–592 26 figs.

476.—Stöhr, P. Ueber Explantation and Transplantation embryonaler Amphibienherzen. Verh. physkik. Ges. Würzburg **49** 1924 pp. 34–42.

Storer, T. I. *vide* Grinnell, J.

477.—Studnička, F. F. Muskelfasern und Bindegewebsfibrillen. Anat. Anz. Jena **57** 1924 pp. 432–446 3 figs.

478.—Sushkin, P. P. (Suškin). Notes on *Dvinosaurus* (Stegocephala, Rhachitoni). C.R. Acad. sci. russ. Petrograd **1923** A. pp. 11–13.

479.—Swett, F. H. Initiation of growth processes by mechanical stimulation. Anat. Rec. Philadelphia **27** 1927 pp. 188–189.

480.—Swett, F. H. Regeneration after amputation of abnormal limbs in Amblystoma. Anat. Rec. Philadelphia **27** 1924 pp. 273–287 figs. 1–8.

481.—Swett, F. H. Exceptions to Bateson's rules of minor symmetry. Anat. Rec. Philadelphia **28** 1924 pp. 63–77 text-figs. 1–15.

482.—Swingle, W. W. Experiments on the metamorphosis of the Colorado axolotl. Anat. Rec. Philadelphia **27** 1924 p. 220.

483.—Swingle, W. W. Some factors involved in the metamorphosis of the Colorado axolotl. Anat. Rec. Philadelphia **29** 1924 p. 101.

484.—Sworder, G. H. On a few Reptiles and Batrachians from Singapore Islands. Singapore Naturalist **1924** (3) pp. 15–20.

485.—Sworder, G. H. An addition to the list of Singapore Snakes and a few notes on species already included. Singapore Naturalist **1924** (3) pp. 21–22.

486.—Taylor, E. H. et **Noble,** G. K. A new Genus of Discoglossid Frogs from the Philippine Islands. Amer. Mus. Novit. New York no. **121** 1924 pp. 1–4 fig.

487.—Terrentjev, P. Очеркземноводныx. (Amphibia). Moscow 1924 [Russian.]

488.—Thacker, T. L. Notes on Bell's Painted Turtles (*Chrysemys marginata bellii*) in British Columbia. Canad. Field Nat. Ottawa **38** 1924 pp. 164–167 **1** fig.

489.—Thapar, G. S. On the arterial system of the Lizard *Varanus bengalensis* (Daud.) with notes on *Uromastix* and *Hemidactylus*. J. Asiat. Soc. Beng. Calcutta **19** 1924 pp. 1–13 5 figs.

490.—Thurnberg, T. Eine einfache Methode, Frösche mit Urethan zu narkotisieren. Skand. Arch. Physiol. Berlin **45** 1924 pp. 166–168.

491.—Travassos, L. *Sebekia* du poumons des crocodiles d'Amérique. C.R. soc. biol. Paris **90** 1924 pp. 239–240.

492.—Troedsson, G. T. Om Krokodilfynden i Skånes yngsta krita. Geol. För. Förh. Stockholm **45** 1923 pp. 546–566 text-figs. 1–5.

493.—Tzarewsky, S. T. Formae *Viperae ammodyta* L. in Europa et in Transcaucasia collected. Bul. Acad. Sci. Russ. Petrograd **9** 1915 p. 269.

494.—Ubisch, L. von. Das Differenzierungsgefälle des Amphibienkörpers und seine Auswirkungen. Arch. Entw. Mech. Berlin **52** 1923 pp. 641–670 24 figs.

495.—Ubish, L. v. Ueber den Entwicklungsmodus der Amphibienlinse. Verh. physik. Ges. Wurzburg **49** 1924 pp. 23–30.

496.—Ubisch, L. von. Ueber den Einfluss verschieden hoher Temperatur auf die Bildung der Linse von *Rana fusca*, *R. esculenta* und *Bombinata pachypus*. Zs. wiss. Zool. Leipzig **123** 1924 pp. 37–102 26 figs.

497.—Uhlenhuth, E. Nature of the retarding influence of thymus upon Amphibian metamorphosis. J. Gen. Physiol. Baltimore **1** 1919 pp. 305–313.

498.—Uhlenhuth, E. Relation between metamorphosis and other developmental phenomena in Amphibians. J. Gen. Physiol. Baltimore **1** 1919 pp. 525–544 9 figs.

499.—Uhlenhuth, E. Experimental production of gigantism by feeding anterior lobe of the hypophysis. J. Gen. Physiol. Baltimore **3** 1921 pp. 347–365.

500.—Uhlenhuth, E. The function of the Bensley cell in the thyroid of the salamander, *Amblystoma opacum*. Anat. Rec. Philadelphia **27** 1924 p. 223.

501.—Uhlenhuth, E. et **McGowan,** J. The growth of the post-branchial body in the salamander, *Amblystoma opacum*. Anat. Rec. Philadelphia **27** 1924 p. 223

Ungar, I. *vide* Houssay, B. A.

502.—Valle, A. della. La Prima formazione dell'Embrione degli Omeotermi durante la fase della della nota Primitiva. Rend. Acad. Sci. Fis. Nat. Napoli **29** 1923 pp. 141–145.

503.—Van Denburgh, J. Notes on the Herpetology of New Mexico with a list of species known from that State. Proc. Cal. Acad. Sci. San Francisco ser. 4 **13** 1924 pp. 189–230.

504.—Van Denburgh, J. Contributions to oriental Herpetology. I. Sakhalin. Proc. Californ. Acad. Sci. San Francisco **13** 1924 pp. 243–246.

505.—Van Denburgh, J. On *Laticauda schistorhynchus* and *Laticauda semifasciata.* Proc. Californ. Acad. Sci. San Francisco **13** 24 pp. 247–248.

506.—Van Denburgh, J. A Fifth record of the Pacific Leather-Back Turtle on the Coast of California. Copeia Northampton U.S.A. **130** 1924 p. 53.

507.—Vandevelde, J. J. A. Observations sur la respiration chez les larves d'Amphibiens. Mem. Acad. Roy. Belg. Brussels **7** fascic. **7** 1924 pp. 1–45 4 figs.

Vásárhelyi, B. *vide* Verzár, F. et Vásárhelyi.

508.—Veit, O. Entwicklungsgeschichte und vergleichende Anatomie in ihren Wechselbeziehungen zueinander, erörtert an dem Problem des Wirbeltierkopfes. Anat. Anz. Jena **58** 1924 pp. 374–393 6 figs.

509.—Vejnarová, E. Beschleunigung der Regeneration durch Verminderung der Oberflächspannung des Mediums. Arch. mikr. Anat. Entw. Berlin **101** 1924 pp. 553–557.

510.—Verzár, F. et **Vásárhelyi,** B. Die Funktion der Thyroidea bei Mangel an Vitamin B' (Avitaminose und Inkretion). Arch. ges. Physiol. Berlin **206** 1924 pp. 675–687.

511.—Verzár, F. et **Vásárhelyi,** B. Die Funktion des hämapoetischen Apparates bei Avitaminogen, besonders beim experimentellen Skorbut. Arch. ges. Physiol. Berlin **206** 1924 pp. 688–702.

512.—Villiers, C. de. On the Anatomy of the breast and shoulder apparatus of Xenopus. Ann. Transvaal Mus. Pretoria **10** 1924 pp. 197–211 6 figs.

Vintemberger, P. *vide* Ancel and Vintemberger, 23 & 24.

513.—Viosca, P., jr. A contribution to our knowledge of the water snakes. Copeia Northampton U.S.A. **126** 1924 pp. 3–13.

514.—Viosca, P., jr. Observations on the life history of *Ambystoma opacum.* Copeia Northampton U.S.A. **134** 1924 pp. 86–88.

515.—Viosca, P., jr. A terrestrial form of *Siren lacertina.* Copeia Northampton U.S.A. **136** 1924 pp. 102–104.

516.—Vogt, T. Reptilien und Amphibien aus Szetschwan, Osttibet und Tschili. Zool. Anz. Leipzig **60** 1924 pp. 337–344.

517.—Voss, H. Studien zur künstlichen Entwicklungserregung des Froscheies. 1. Wirkung und Wesen der Einimpfung von Zellelementen in das Froschei bei der traumatischen Parthenogenese. Arch. Entw. Mech. Berlin **52** 1923 pp. 616–640.

518.—Voss, H. Die Lokalisation oxydativer Fermente in den Ovarialeiern des Frosches. Arch. mikrosk. Anat. Entwickl. Berlin **100** 1924 pp. 560–572 3 figs.

519.—Vrtelowna, S. Sur les changements de couleur de la peau chez les Batraciens anoures privés de la vue. C.R. soc. biol. Paris **90** 1924 pp. 1366–1368.

520.—Wada, Y. Beiträge zur vergleichenden Physiologie des Gehörorganes. Arch. ges. Physiol. Berlin **202** 94 pp. 46–69.

521.—Wagner, K. Experimentelle Untersuchungen über die Umwandlung des Geschlechts beim Frosch. Arch. Entw. mech. Berlin **52** 1923 pp. 386–394 5 figs.

522.—Wall, F. A Hand-List of the Snakes of the Indian Empire. Part III. J. Bombay Nat. Hist. Soc. **29** 1924 pp. 864–878.

523.—Wall, F. A Hand-List of the Snakes of the Indian Empire, Part IV. J. Bombay Nat. Hist. Soc. **30** 1924 pp. 12–24.

524.—Wall, F. The Hamadryad or King Cobra, *Naia hannah* (Cantor). J. Bombay Nat. Hist. Soc. **30** pp. 189–195 text-fig. 1.

525.—Wall, F. Notes on Ceylon Snakes collected by M. W. W. A. Phillips. Spolia Zeylan. Colombo **13** 1924 pp. 71–88 3 figs.

526.—Wall, F. Notes on two specimens of the Sea Snake *Lioselasma lapemidoides* (Gray). Spolia Zeylan. Colombo **13** 1924 pp. 89–92 1 fig.

527.—Warren, E. New formations in the duodenal mesentery and stomach-wall of *Bufo regularis* Reuss. S. African J. Sci. **20** 1923 pp. 396–405 2 pls.

528.—Wastl, H. Ueber die Wirkung des Adrenalins auf die Drüsen der Krötenhaut. Zs. biol. München **74** 1921 pp. 77–80.

529.—Watson, D. M. S. The Elasmosaurid shoulder-girdle and fore-limb. Proc. Zool. Soc. London **1924** pp. 885–917 text-figs. 1–12.

530.—Weber, A. Corrélations entre l'existence de surfaces cutanées et le développement des racines postérieures des nerfs rachidiens correspondants chez les larves de Batraciens anoures. C.R. soc. biol. Paris **90** 1924 pp. 163–166.

531.—Weber, A. Destruction précoce de l'ébauche des membres antérieurs chez les Batraciens anoures. C.R. soc. biol. Paris **91** 1924 pp. 1369–1371.

532.—Weiss, N. Anaphylaxie par les venins des Serpents sud-américains. C.R. soc. biol. Paris **91** 1924 pp. 24–25.

533.—Weiss, P. Die Funktion transplantierter Amphibienextremitäten, Aufstellung einer Resonanztheorie der motorischen Nerventätigkeit auf grund abgestimmter Endorgane. Arch. mikr. Anat. Entwickl. Berlin **102** 1924 pp. 635–672 7 figs.

534.—Weiss, P. Regeneration an transplantierten Extremitäten entwickelter Amphibien. Arch. mikr. Anat. Entwickl. Berlin **102** 1924 pp. 673–706 25 figs.

535.—Weissfeiler, J. Régénération des lobes olfactifs et des hémisphères cérébraux chez les Batrachiens Urodèles. C.R. soc. biol. Paris **91** 1924 pp. 543–544.

536.—Wepfer, E. Der Buntsandstein des badischen Schwarzwalds und sein Labyrinthodonten. Monograph Geol. Palaeont. Berlin ser. 2 **1923** pp. 1–101 figs. 1–43.

537.—Werner, F. Die Schlangen unserer Alpen. Zs. Deutsch. Oesterr. Alpenver. München 1924 pp. 105–116 5 text-figs.

538.—Werner, F. Neue oder wenig bekannte Schlangen aus dem Naturhistorischen Staatsmuseum in Wien. Sitzber. Ak. Wiss. Wien. Math.-naturw. Klasse **133** 1924 pp. 29–56 9 figs.

539.—Wertheimer, E. Ueber die Rolle der Haut für den Muskeltonus beim Frosch. Arch. ges. Physiol. Berlin **205** 1924 pp. 634–636.

540. — Wettstein - Westersheim, O. Ueber *Testudo tornieri* Siebr. und *Testudo loveridgii* Blgr. Anat. Anz. Leipzig **61** 1924 pp. 201–208 2 figs.

541.—Wilder, I. W. The relation of growth to metamorphosis in *Eurycea bislineata* (Green). Jour. Exper. Zool. Philadelphia **40** 1924 pp. 1–112.

542.—Wilder, I. W. The developmental history of *Eurycea bislineata* in Western Mass. Copeia Northampton U.S.A **133** pp. 77–80.

543.—Wilder, I. W. Variations in the premaxillary of *Eurycea bislineata*. Amer. Nat. New York **58** 1924 pp. 538–543 figs. 1–3.

544.—Wilder, I. W. and Peabody, E. B. Hermaphroditism in *Eurycea bislineata*. Biol. Bull. Wood's. Hole Mass. **47** 1924 pp. 345–367 8 figs.

545.—Willem, L. Recherches sur la respiration aérienne des Amphibiens. A.—Les mouvements respiratoires chez les Salamandres. Bul. Ac. roy. Bruxelles ser. 5 **9** 1923 pp. 389–407.

546.—Willem, L. Recherches sur la respiration aérienne des Amphibiens. A.—Evolution des manoeuvres respiratoires chez les Amphibiens. Bul. Ac. roy. Bruxelles ser. 5 **10** 1924 pp. 201–218.

547.—Witcshi, E. Überreife der Eier als Kausaler Faktor bei der Entstehung von Mehrfachbildungen und Teratomen. Verh. Natf. Ges. Basel **34** 1923 pp. 33–40 pl. 5 text-figs. A–C.

548.—Witsch, E. Die Beweise für die Umwandlung weiblicher Jungfrösche in männliche nach uteriner Ueberreife der Eier. Zur Kritik der Arbeit von K. Wagner. Arch. mikr. Anat. Entwickl. Berlin **102** 1924 pp. 168 183 11 figs.

549.—Witte, G. de. Une Tortue terrestre à carapace molle. Rev. Zool. afric. Brussels (Suppl. Cercle Zool. Congolais) **12** 1924 pp. 62–63.

550.—Wolter, M. Die Giftdrüse von *Vipera berus*. Jenaische Zs. Naturw. **60** 1924 pp. 305–362 3 pls.

551.—Woodward, A. S. Exhibition of a Dinosaur's egg. Proc. Zool. Soc. London **1924** p. 1173.

552.—Wright, A. H. and A. A. A Key to the eggs of the Salienta east of the Mississippi River. Amer. Nat. New York **58** 1924 pp. 375–381 pl. 1.

553.—Wyeth, F. J. On the development and neuromery of the fore-brain in *Sphenodon punctatus*. Proc. Zool. Soc. London **1924** pp. 923–959 pls. 1–959.

554.—Wyeth, F. J. The development of the auditory apparatus in *Sphenodon punctatus*; with an account of the visceral pouches, aortic arches and other accessory structures. Phil. Trans. R. Soc. London ser. B **212** 1924 pp. 259–366 7 plates.

555.—Yoshida, H. Ueber die Harnbildung in der Froschniere. Arch. ges. Physiol. Berlin **206** 1924 pp. 274–302.

556.—Young, D. B. Abnormal circulatory system of a Frog. Amer. Nat. New York **58** 1924 pp. 287–288.

557.—Zaćwilichowski, J. Die Entwicklung der Lymphherzen beim Molch (*Molge vulgaris* L.). Bul. intern. Acad. Krakow **1917** pp. 134–146 1 plate.

558.—Zepp, P. Beiträge zur vergleichenden Untersuchung der heimischen Froscharten. Zs. ges. Anat. München **69** 1923 pp. 84–180 42 figs.

II.—SUBJECT INDEX.

ANATOMY.

General and Morphological.—Origin of Vertebrate Head, VEIT, **508**; Reptilia, Cranial Articulation, HAYEK, **209**. Suspensorium, DOMBROWSKI, **127**. Anura, FAHRENHOLZ, **146**. *Xenopus*, GROBBELAAR, **185**. Pelvis, MARCUCCI, **311**.

Tegumentary System.—MARTHS, **314**. Adhesive Pads, HORA, **233**. Innervation and sense organs, BRÜCKE, **84**; CALABRESI, **92**. Cephalic glands, REESE, **408**. Pigmentary effector system, HOGBEN, **228**. Carapace, FRIES, **158**.

Myology.—Orbital, LEBLANC, **297**. Facial, HUBER, **236**. Shoulder-girdle, ROMER, **418**. Heart, SHANER, **447**. Ichthyosaur paddle, ANDREWS, **27**.

Osteology (recent forms).—Reptilia, BROOM, **82**; MULLER, **335**. Teeth and Bones, SCHNEIDER, **439**. *Pelobatidae*, NOBLE, **353**. Skull, fenestration in, CASE, **93**. *Proteus*, DOLIVO-DOBROVOLSKY, **125**. Alisphenoid, GREGORY & NOBLE, **183**. Auditory ossicles, KLAAUW, **255**. Premaxilla, (*Eurycea*) WILDER, **543**. Suspensorium, DOMBROWSKI, **127**. Atlas and Pro-atlas, HAYEK, **209**. Shoulder-girlde, NOBLE, **356**. VILLIERS, **512**. Femur, ALTMANN, **15**.

Osteology (extinct forms).—AMALITZKI, **17, 18**. Reconstructions, PEARSON, **377**. Composition of fossil bone, ROGERS, **415**. Chelonia, OERTEL, **364**. Cynodontia, HAUGHTON, **202**. Diapsida, HAUGHTON, **201**. Dinosauria, GILMORE, **172**. HOLLAND, **230**. PARKS, **372**. Eosuchia, BROOM, **83**. Mesosuchia, HAUGHTON, **207**. Notosauria, ARTHABER, **37**. Pterodactyls, DÖDERLEIN, **124**. Thecodonts, HAUGHTON, **203**. Cranium, BROOM, **81**; HOLLAND, **229**; PIVETEAU, **384**; RIABININ, **413**. Teeth, DOLLO, **126**; HOLLAND, **229**. Vertebrae, ANDREWS, **26**; WATSON, **529**. Femur, ROMER, **419**.

Nervous System.—COGHILL, **103, 104**. Brain, LATIMER, **294, 295**; DEMPE, **118**; WYETH, **553**; HERRICK, **215, 216**; ROTHIG, **423**; LARSELL, **293**; KUHLENBECK, **278**; KOSTER, **266**. Eyes, ENGELHARDT, **144**; FRANÇOIS ET PIERON, **155**; FRANZ, **156**. Ear, EISINGER

ET STERNBERG, **140**; BRUNI, **86**; RANZI, **403**. Labyrinth organ, PROEBSTING, **395**. Balancer, NICHOLAS, **349**. Spinal cord (fossil), EDINGER, **138**. Nerve endings, KULCHITSKY, **280**; MURRAY, **341**. Cardiac nerves, COUVREUR & DUCULTY, **108**.

Circulatory System.—GROBBELAAR, **186**; THAPAR, **489**. Abnormality, YOUNG, **556**. Blood, SABRAZÈS et MURATET, **428**, **429**; NOTKIN, **362**. Heart, CORDS, **106**; RAU, **406**, **407**; HOFMAN, **226**. Vessels and Sinuses, GELDEREN, **164**, **165**, **166**; BREMER, **77**, **78**; FEDOROWICZ, **149**; GUNTHER, **193**.

Lymphatic System.—FEDOROWICZ, **150**; SIEDLECKI, **449**.

Respiratory System.—FRAZIER, **157** RAU, **406**.

Alimentary System.—Venom apparatus, WOLTER, **550**. Digestive tract, KUNTZ, **282**; DUNN, **132**; SCHLESINGER, **432**.

Urinogenital System.—BECCARI, **53**; HETT, **222**; KOLMER et KOPPÁNYI, **257**; OBRESHKOVE, **363**; REESE, **409**; WOODWARD, **551**; WRIGHT, **552**.

Histology.—ABE, **2**; BAU, **48**; EMMEL, **143**; JORDAN, **243**; MAINX, **309**; KRIEG-TÜBINGEN, **268**; KULCHITSKY, **279**; PETER, **379**; SCHUBERT, **442**; STUDNIČKA, **477**; SSYSSOJEW, **465**; WEISS, **533**.

PHYSIOLOGY.

A.—NATURAL.

General.—COGHILL et MOORE, **105**; ZEPH, **558**; WERTHEIMER, **539**. Metabolism, KONOPACKI, **261**. Size and energy, RUBNER, **426**. Energy transformation, RUBNER, **425**. Nutrition, PRZYLECKI, **397**, **398**, **399**; KŘÍŽENECKÝ, **269**; KŘÍŽENECKÝ et PODHRADSKÝ, **272**, **273**, **274**, **275**; PEARSE et LEPKOWSKY, **375**; PRZYLECKI et KARCZEWSKI, **396**; SWETT, **479**. Vitamins, VERZÁR et VÁSÁRHELYI, **511**.

Nervous System.—ATHANASIU, **38**; STEVENSON et COGHILL, **471**; ROSE, **420**; SCHOTTÉ, **440**; KOMINE, **258**; BRÜCKE, **85**. Equilibrium, ALMEIDA, **13**; ALMEIDA et FIALHO, **14**. Auditory organ, WADA, **520**.

Alimentary System.—ENGLE, **145**; KUNTZ, **282**.

Circulatory System.—AVEL, **39**, **40**; BOUCKAERT, **68**; CLARK, **100**; COGHILL et MOORE, **105**; ISAYAMA, **240**; NOTKIN, **362**.

Respiratory System.—CROFTS et LAURENS, **109**; LUMSDEN, **303**; MARCUS, **312**; NOBLE, **358**; SHAFER, **446**; VANDERVELDE, **507**; WILLEM, **545**, **546**

Urinary System.—HAAN & BAKKER, **195**; OKAMOTO, **366**; YOSHIDA, **555**; Kidney, BIETER et HIRSCHFELDER, **58**.

Sex.—ARON, **33**, **34**, **35**; BALLOWITZ, **41**; BURNS, **88**; CHAMPY, **98**; DAUWART, **114**; GELLHORN, **167**; HARGITT, **198**; HUMPHREY, **237**; KÄNDLER, **249**; NOBLE, **354**; PONSE, **387**; PRZIBRAM, **400**; VOSS, **518**; WAGNER, **521**; WILDER et PEABODY, **544**; WITSCHI, **548**. Bidder's Organ, HARMS, **199**; PONSE, **387**.

Glands and Secretions.—Adrenalin, KŘÍŽENECKÝ, **270**; WASTL, **528**. Suprarenal, GAROFOLINI, **161**; HERWERDEN, **221**. Pancreas, ARON et ALFONSI, **36**. Insulin, HEMMINGSEN, **212**; HUXLEY & FULTON, **239**; SCHWARTZ et BRICKA, **444**. Hypophysis, BREMER, **76**; FENN, **153**; GREENWOOD, **182**; KŘÍŽENECKÝ, **271**; NOKAKI, **359**; UHLENHUTH, **499**. Thyroid, GROEBBELS, **187**, **188**; HELFF, **210**; KAUFMAN, **250**; MCCARRISON, **307**; OHNO, **365**; RABBENO, **402**; ROMELS, **417**; SKOWRON, **452**; SPEIDEL, **462**, **463**; UHLENHUTH, **500**; VERZÁR et VÁSÁRHELZI, **510**. Thymous, GROEBBELS, **189**. Glands, general, ARON, **33**, **34**, **35**; KAUFMANN, **251**; GROEBBELS, **189**, **190**, **191**; SCHULZE, **443**; THUNBERG, **490**.

Venoms and Sera.—BRENNAN, **79**; CAIUS et STEICHEN, **89**; CAIUS, IYENGAR et ANDERSON, **90**; DOUGLAS, **128**; ISHIWARA, **241**; KRAUS, **267**; MAKI, **310**; MAZZA, **318**, **319**; PHISALIX, **382**; WEISS, **532**.

Pigment and Colour Changes.—DESPAX, **121**; FARIS, **148**; HERBST, **214**; HOGBEN, **227**; HOUSSAY et UNGAR, **235**; JORDAN et SPEIDEL, **245**; KOPPÁNYI, **264**; KŘÍŽENECKÝ, **271**; KRÜGER et KERN, **276**; MERTENS, **324**; SMITH et GRAESER, **457**; SPAUL, **458**, **459**; VRTELOWNA, **519**.

B.—Experimental.

Miscellaneous.—Alberti et Politzer, **11**; Bock, **62**; Bouckaert et Belehradek, **69**; Helff, **211**; Jordan, **244**; Lapicque, **292**; May, **317**, Ott, **368**; Pauli et Hartmann, **374**; Podhradský, **385**.

Extirpations.—Bogucki, **64**; Houssay et Ungar, **234**; Giusti et Houssay, **175**; Przylecki, **399**.

Transplantations.—Ehrenpreis, **139**; Gassul, **163**; Hirschler, **225**; Koppányi, **263**; Lebedinsky, **296**; Milojevic, **328**; Nicholas, **347**; Przibram, **401**; Reis, **410**; Sternberg, **470**; Stohr, **474, 475, 476**; Weiss, **533, 534**.

Regeneration.—Bogucki, **63**; Duesberg, **130**; Giorgi, **174**; Godlewski, **177**; Kalocsay-Kalusza, **247**; McCreight, **308**; Naville, **343, 344**; Schotté, **440**; Simões-Raposo, **450**; Swett, **480**; Vejnarová, **509**; Weisfeiler, **535**; Weiss, **534**.

Pathology.—Baylis, **50**; Baylis et Cannon, **51**; Crozier, **110**; Gambier **159**; Hertling, **217**; Herwerden, **220**; Sabrazès & Muratet, **429**; Travassos, **491**; Warren, **527**.

DEVELOPMENT.

Gonads.—Aron, **33**; Barthelemy et Bonnet, **47**; Beccari, **53**; Bogucki, **63**; Bounoure, **71, 72**; Champy, **97, 98a, 99**; Duschax, **137**; Humphrey, **237**; Konopacki, **260**; Koppányi, **263**; Voss, **517**; Wagner, **521**; Witschi, **548**.

Segmentation and Ova.—Giglio-Tos, **171**; Golgi, **179**; Smith, **455**; Witschi, **547**.

Fertilization, natural and induced.—Loeb, **299**; Rostand, **422**; Voss, **517**.

Embryology (experimental) (*See also* **Physiology,** Glands and Secretions, Pigments, Transplantations, Regeneration).—Abderhalden, **1**; Adams, **5**; Alberti et Politzer, **11**; Ancel et Vintemberger, **23, 24**; Bellamy et Child, **55**; Hertwig, **218, 219**; Kopeć, **262**; Kříženecký, **270**; Nicholas, **348**; Przibram, **400**; Spemann et Mangold, **464**; Ubisch, **496**; Weber, **531**.

Larval and Experimental Metamorphosis.—Dennert, **119**; Drzewicki, **129**; Dunn, **133**; Giacomini, **168**; Kaufman, **250, 251**; Kuntz, **282**; McCarrison, **307**; Noble, **357**; Sato, **430**; Sembart, **445**; Smith, **454**; Speidel et Dickey, **463**; Swingle, **482, 483**; Uhlenhuth, **497, 498**; Viosca, **514, 515**; Wilder, **541, 542**.

Miscellaneous.—Acquired and Inherited Immunity, Haecker, **196**; Schiller, **431**. Differentiation of Embryo, Felicine-Gurwitsch, **152**; Huxley, **238**; Ubisch, **494**; Secretions and correlation, Schulze, **443**.

Organogeny.—General, Giersberg, **169**; Jordan & Speidel, **245**; Valle, **502**. Nervous System, Giersberg, **170**; Haller, **197**; Kostir, **266**; Landacre, **284**; Nicholas, **349**; Weber, **530**; Wyeth, **553**. Olfactory, Eckman, **142**. Eye, Police, **386**; Ubisch, **495**. Auditory, Eisinger et Sternberg, **140**; Ranzi, **404**; Wyeth, **554**. Head and Skeleton, Adams, **4**; Fahrenholz, **147**; Gregory et Noble, **183**; Stadtmüller, **466**; Veit, **508**; Wyeth, **554**. Limbs, etc., Ekman, **141**; Lange, **286**; Romer, **418**; Stieve, **472**. Integument, Faris, **148**; Naville, **344**; Rylkoff, **427**; Viosca, **513**. Alimentary System, Abe, **2**; Fahrenholz, **146**; Grodziński, **192**; Kindred, **252**; Wyeth, **554**. Urinogenital, Maschkowzeff, **315**; Reese, **409**. Circulatory, Clark, **100**; Fedorowicz, **149**; Hartmann, **200**; Wyeth, **554**; Zaćwilichowski, **557**.

VARIATION AND EVOLUTION.

Variation.—Bremer, **77**; Cyrén, **111**; Despax, **121**; Dunn, **131**; Fejérváry, **151**; Jensen, **242**; Lantz et Cyrén, **291**; Noble, **356**; Phisalix, **381**; Schmidt, **435**; Van Denburgh, **508**; Viosca, **513**; Wettstein-Westerheim, **540**; Wilder, **543**.

Phylogeny.—Arthaber, **37**; Broom, **82**; Goodrich, **180**; Gräfer, **181**; Romer, **419**; Watson, **529**.

Teratology.—Burns, **88**; Chabanaud, **94**; Flower, **154**; Glaesner, **176**; Hewer, **223**; Kuntz, **281**; Neal, **345**; Pinney, **383**; Procter, **394**; Swett, **480, 481**; Young, **556**.

ETHOLOGY.

General and Miscellaneous.—BERGANER, **56**; BISHOP, **59**; METCALF, **327**; OSBORN, **367**; OVER, **369**; ROLLINAT, **416**; GOETSCH, **178**; GUTHRIE, **194**; LANG, **285**; NOBLE, **356**.

Life-Histories.—BEEBE, **54**; KOPSTEIN, **265**; POPE, **389**; VIOSCA, **514**; WILDER, **542**.

Habits and Habitats.—Batrachians, BRYCE, **87**; GRASSI, **162**; MERTENS, **326**; PATCH et STEWART, **373**; RODDA, **414**; VIOSCA, **515**. Reptilia, MERTENS, **326**; Ophidia, MCCANN, **306**; MOLE, **332**; WALL, **524, 525**. Crocodilia, SCHMIDT, **434, 435**. Lacertilia, COTT, **107**. *Sphenodon*, KRULL, **277**; Chelonia, MONROE, **333**; THACKER, **488**. Breeding, BOLKAY, **67**; DAVEY, **115**; DESPAX, **123**; DUNN, **133**; LANTZ, **288**; MERTENS, **326**; NOBLE, **356**; POPE, **388**; SPECK, **460**.

Behaviour and Feeding.—LANTZ, **289**; PROCTER, **394**; SPECK, **461**; BEADON, **52**; BREDER, **74, 75**; DUNN, **132**; MATTHES, **316**; RAO, **405**.

FAUNAE.

A.—ACTUAL.

Geographical distribution, lines of dispersal; HEWITT, **224**.

PALAEARCTIC.

France (N.E. and E.), LANTZ*, **290**. France and Belgium, SHREITMÜLLER*, **441**. Spain, DESPAX, **122**. Alps, WERNER, **537**. Hungary, MÉHELY*, **320**. Bosnia-Hercegovina, BOLKAY, **66**. Caucasus, LANTZ et CYRÉN, **291**, Russia, CZAREWKY, **112**; LANTZ, **287**; NIKOLSKY*, **350, 351, 352**; TERENTJEV, **487**. Sardinia, Corsica, Malta, DEHAUT, **117**; FEJÉRVÁRY, **151**; MERTENS, **324**; Morocco and Algeria, ALLUAUD, **12**; CHABANAUD, **96**; PELLEGRIN, **378**. Persia and Mesopotamia, MERTENS, **325, 326**; NESTEROV, **346**. Tibet, VOGT, **516**. Japan, STEJNEGER, **468**.

NEARCTIC.

Nearctic, SIEBENROCK, **448**. N. America, SCHMIDT, **434**. U.S.A., BRADY, **73**; WRIGHT, **552**. Alabama, HOLT, **231, 232**. Arizona, SCHMIDT, **436**. California, VAN DENBURGH, **506**. San Diego County, KLAUBER, **256**; Yosemite, GRINNELL et STORER*, **184**. Carolina, N., BRIMLEY, **80**; id. S. SCHMIDT, **437**; Wilmington, MYERS*, **342**. Dakota, OVER, **369**. New Mexico, VAN DENBURGH*, **503**.

NEOTROPICAL.

Central America, DUNN, **135**; MÜLLER, **336**; SCHMIDT, **435**. Honduras, DUNN, **131**. Panama, AMARAL, **20**; DUNN, **131, 133, 134**. Colombia, AMARAL, **22**; BARBOUR, **44**. Ecuador, AMARAL, **21**. Surinam, AMARAL, **22**, MÜLLER, **338**. S. America, MÜLLER; **331, 339**. Brazil, AMARAL, **22**; LUTZ, **304, 305**; MIRANDA-RIBEIRO, **329, 331**; MÜLLER, **334, 338, 340**; PARKER, **370**. Peru (bibliography), NOBLE, **355**. Argentina, AMARAL, **21**; DEGERBØL, **116**. Galapagos BEEBE*, **54**.

West Indies, COCHRAN, **102**. Cuba, AHL, **10**. Haiti, COCHRAN, **101**. Trinidad (Snakes of), MOLE*, **332**.

ETHIOPIAN.

Africa, AHL, **7, 8**; NOBLE*, **356**. Arabia, AHL, **9**. East Africa, ANGEL, **30, 31, 32**; CALABRESI*, **91**; LOVERIDGE*, **301**; DE WITTE, **549**. Central Africa, AHL, **6**. Rhodesia, ANGEL, **29**. S.W. Africa, AHL, **10**. Angola, ANGEL, **29**. Belgian Congo, NOBLE*, **356**. Cameroons, KANBERG, **248**. Togoland, AHL, **10**. Senegal, AHL, **10**; Madagascar, MÜLLER, **337**.

INDIAN.

India, WALL*, **522, 523**. Bombay Island and Salzette, PRATER*, **390**. S. India, PROCTER, **393**. Ceylon, WALL*, **525**. N. Siam, JOHNSON, **246**. Indo-China, CHABANAND, **94**; SMITH, **453**. Singapore Islands, SWORDER*, **484, 485**. China, BOULENGER, **70**; STEJNEGER, **467, 469**; VOGT, **516**.

An * indicates complete faunal lists or monographs as distinct from notes on collections or isolated specimens. *See also* Systematic Index.

Borneo, ANDERSSON, **25**; MERTENS, **323**. Sumatra, PARKER, **371**. Phillippines, TAYLOR et NOBLE, **486**.

AUSTRALIAN CONTINENT.

Australia, BARRETT, **46**; PROCTER, **394**; KINGHORN, **253**.

Fiji Islands.—BARBOUR, **42**.

B.—FOSSIL.

Carboniferous.—PETERSON, **380**.

Permo-Carboniferous.—HENDERSON, **213**; HAUGHTON, **201**; RIABININ, **412**.

Permian.—AMALITZKY, **16, 17, 18**; WEPFER, **536**.

Traissic.—HAUGHTON, **204, 205, 207, 208**; MARIANI, **313**; PEARSON, **376**.

Jurassic.—HOLLAND, **229, 230**; OERTEL, **364**; PIVETEAU, **384**.

Cretaceous.—ABEL, **3**; DEPÉRET et RUSSO, **120**; DOLLO, **126**; GILMORE, **172**; HAUGHTON, **204**; PARKS, **327**; ROSENKRANTZ, **421**; SCHNEIDER, **438**.

Tertiary.—SCHLOSSER, **433**.

Eocene.—ANDREWS, **26**.

Oligocene.—NOBLE, **353**; SINCLAIR, **451**.

III.—SYSTEMATIC INDEX.

REPTILIA.

Systematic.

Summary of work since 1918, BERTIN, **57**.

Classification and evolution, BROOM, **82**.

Bibliography of Pre-Stormberg Karroo forms, HAUGHTON, Trans. R. Soc. S. Afr. **12** p. 51, Tables.

Complete Faunal Works.

N.E. and E. France, LANTZ **290**; N.E. France and Belgium, SCHREITMÜLLER **441**; Hungary, MÉHELY **320**.

Kenya, Uganda, Tanganyika Territory and Zanzibar (check list), LOVERIDGE **301**.

Singapore, SWORDER **484**; Sakhalin Id. (Siberia), VAN DENBURGH **504**.

Wilmington, N. C., MYERS **342**; S. Dakota, OVER **369**; New Mexico, VAN DENBURGH **503**.

Collections and Notes.

Collection in the London Zoo, MERTENS **325**; in the Bosnia-Hercegovinian Museum, BOLKAY **66**.

C. Russia, CZAREWSKY **112**; S. and S.W. Australia, KINGHORN **253**; Haiti, COCHRAN **101**; S. Carolina, SCHMIDT (K.P.) **437**.

Ethology.

Photos of living Australian spp., BARRATT **416**.

Miscellaneous.

Parasites, BAYLIS **49**; BAYLIS and CANNON **51**.

Stomach stones, ENGLE **145**.

Fenestration in primitive skulls, CASE **93**.

ORDER LACERTILIA.

From Tibet and China, VOGT **516**.

Faunal Works.

Of Russia, NIKOLSKY **350**; of the Galapagos Id., BEEBE **54**.

GECKONIDAE.

Gymnodactylus heterocercus mardinensis **subsp. n.** Mardin, N. Mesopotamia, MERTENS, Senckenb. Frankfurt **6**, 1924 p. 84; notes, MERTENS **326** p. 358 pl. 12.

Phyllodactylus elisæ compared with *Ph. eugeniae*, CZAREWSKY **113**; *P. magister* **sp. n.** Peru, NOBLE Occ. Pprs. Boston Soc. Nat. Hist. **5** p. 110.

Hemidaclytus leschenaulti, *H. flaviviridis* cannibals, RAO (Y.R.) **405**.

Cainodactylus **gen. n.** for *Gehyra yunnanensis* Boulenger, BARBOUR Occ. Paprs. Soc. Nat. Hist. Boston **5** 1924 p. 133.

Aeluroscalabotes longicaudatus **sp. n.** Borneo, ANDERSSON Nyt. Mag. Nat. Kristiania **61** p. 122.

PYGOPODIDAE.

Lialis burtonis and *L. jicari* reviewed, KINGHORN **254**.

AGAMIDAE.

Calotes flavigula **sp. n.** (Pahang, Malay Peninsula) near to *C. floweri* Blgr., SMITH J. Fed. Malay Mus. **11** p. 182.

Agama planiceps pl., ANGEL **29.**

Hylagama **gen. n.** *H. borneensis* **sp. n.** Borneo [allied to *Dendragama*], MERTENS Zool. Anz. Leipzig **60** pp. 155-156.

Phrynocephalus caudivolvulus Pallas = *P. guttatus* Gmelin, LANTZ Bul. Soc. Zool. France **47** p. 192.

Physignathus, parasites, BAYLIS **50.**

Hydrodsaurus amboinensis, figured and described, KOPSTEIN **265.**

Thaumatorhynchus **gen. n.** *brookesi* **sp. n.** Sumatra [allied to *Harpesaurus* Blgr.], PARKER Ann. Mag. N.H. (ser. 9) **14** p. 624.

IGUANIDAE.

Anolis muelleri, A. abatus, A. calliurus **spp. nn.** Cuba, AHL Arch. Natg. Berlin A **90** pp. 247, 248, 249.

Polychrus acutirostris photo of living specimen, notes, COTT **107.**

Polychroides **gen. n.** *peruvianus* **sp. n.** Peru [allied to *Polychrus*], NOBLE Occ. Pprs. Boston Soc. Nat. Hist. **5** p. 109.

Stenocercus nigromaculatus **sp. n.** Peru, NOBLE Occ. Pprs. Boston Soc. Nat. Hist. **5** p. 112.

Liolaemus annectens orientalis **subsp. n.** Bolivia, MÜLLER Mitt. Zool. Mus. Berlin **11** p. 81.

Tropidurus continentalis Ecuador p. 82, *T. praeornatus, T. pictus* Bolivia pp. 83, 85, **spp. nn.**, MÜLLER Mitt. Zool. Mus. Berlin **11.**

Amblyrhynchus cristatus, ethology (life history), photos from nature, BEEBE, **54.**

Conolophus subcristatus, habits, plate, photos from nature, BEEBE **54.**

Cyclura ricordii re-described, *C. cornuta*, notes, COCHRAN Proc. U. S. Nation. Mus. **66** (6) pp. 5–9.

Sceloporus taylori **sp. n.** Yosemite, GRINNELL et STORER Animal Life in the Yosemite, San Francisco **1924**; *S. undulatus* ♂, *S. spinosus* ♀ courting display, SPECK **460.**

Phrynosoma Wieg., 1828, *orbiculare* *L.* to be retained, STILES **473.**

ANGUIDAE.

Diploglossus tenuifasciatus **sp. n.** Brazil, PARKER Ann. Mag. N.H. s. 9 **13** p. 586, fig.

HELODERMATIDAE.

Heloderma suspectum, fatal bite of, spitting of, BRENNAN, **79.**

VARANIDAE.

Varanus russelii, type, MERTENS **322.**

TEIIDAE.

Dicrodon barbouri **sp. n.** Peru, NOBLE Occ. Pprs. Boston Soc. Nat. Hist. **5** p. 108.

Neusticurus surinamensis **sp. n.** Surinam, MÜLLER Zool. Anz. Leipzig **58** p. 295.

AMPHISBAENIDAE.

Amphisbaena dubia **sp. n.** Brazil, MÜLLER Mitt. Zool. Mus. Berlin **11** p. 86.

LACERTIDAE.

Lacerta, geographical variation, CYRÉN **11**; melanism of in Mediteranean Islands, MERTENS **324**; development of hypophysis, HALLER **197**; behaviour, LANTZ **289.**

L. agilis L. to be retained, STILES **473**; limb development, STIEVE **472**; *L. viridis media* **subsp. n.** Caucasus, LANTZ et CYRÉN Bul. Soc. Zool. France **45** (1920) p. 33; *L. strigata* **subspp.**, MERTENS **326**; *L. taurica fiumana*, pairing, BOLKAY **67**. *L. muralis* Maltese vars.—*L. m. despotti*, p. 4 *L. m. Kieselbachi* p. 9., *L. m. laurentii-mülleri* **subspp. nn.** Maltese Islands, FEJÉRVÁRY Biol. Hungarica **1** (5); abnormal head shields, ANGEL **28**; life-study, ROLLINAT **416**; *L. sicula, L. doderleinii, L. perspicillata*, notes on, MERTENS **322**; *L. deserti* Gmelin = **subsp. n.** of *Eremias arguta* Pallas, LANTZ Bul. Soc. Zool. France **47** p. 192.

Lacerta. Apathya cappadocia, MERTENS **326.**

Eremias Wieg., 1834 (*velox*) to be retained, STILES **473.**

Ophiops. Ophisops elegans ehrenbergii, MERTENS, **226.**

SCINCIDAE.

Mabuya Fitz., 1826 (*sloanii*) to be retained, STILES **473**; *M. aurata*, table of sub-species, MERTENS **326**; *M. a. aurata* Linn. = *M. septemtaeniata* Reuss., MERTENS **326** p. 377.

Lygozoma (*Otosaurus*) *wolfi* synonymy of, MERTENS **322**.

Ablepharus massaïensis **sp. n.** B. E. Africa, ANGEL Bull. Mus. Hist. Nat. Paris **1924** p. 52.

Eumeces schneiderii geographic forms of, MERTENS **322**; *E. s. princeps* Eichwald, MERTENS **326**; *E. tunganus* **n. sp.** W. Szechwan, STEJNEGER Journ. Acad. Sci. Washington **1924** p. 384.

Sphenomorphus cameronicus **sp. n.** (Pahang, Malay Peninsula), near *Lygosoma malayanum* Doria, SMITH J. Fed. Malay Mus. **11** p. 184; *S. ocelliferus* notes on, MERTENS **322**.

Typhlacontias key to spp., *T. rohani* **sp. n.** Angola, ANGEL, Mission Rohan-Chabot Angola et Rhodesia 1912–1914 Paris 1923 **4** (1) p. 162, pl. figs.

SUBORDER RHIPTOGLOSSA.

CHAMAELEONTIDAE.

Chamaeleon vulgaris, blood, SABRAZÈS et MURATET **428**; orbital muscles, LEBLANC **297**; egg-laying in captivity, LANTZ **288**. *C. linotus* **sp. n.** Madagascar, MÜLLER Mitt. Zool. Mus. Berlin **11** p. 95. *C. krempfi* **sp. n.** Indo-China, CHABANAUD Bul. Museum Paris **29** 1923 p. 209. *C. krempfi* Chab. = *C. pardalis* Cuv., CHABANAUD **95**.

ORDER OPHIDIA.

Complete Faunal Works.

Indian spp., WALL pt. iii **522**, pt. iv **523**; Bombay Island and Salsette, PRATER **390**; Russia, NIKOLSKY **351**; Trinidad (with ethology and photos), MOLE, **332**.

Collections and Notes.

From Tibet and China, VOGT **516**; Remains in Tertiary of Mongolia, SCHLOSSER **433**; Notes on C. Amer. spp., AMARAL **20**.

Distribution in San Diego, KLAUBER **56**.

Albino specimens, KLAUBER **256**; PROCTER **394**.

Venom, MAZZA **318**; action of, WEISS **532**.

PALAEOPHIDAE.

†*Palaeophis africanus* **sp. n.** Eocene of Nigeria, *P. typhoeus* compared, ANDREWS Bull. Geol. Surv. Nigeria **7** p. 39 figs. 1–2.

TYPHLOPIDAE.

Helminthophis genus revised, key to spp., *H. praeocularis* Colombia p. 28, *H. incertus* Surinam p. 29, *H. beui* São Paulo p. 29 **spp. nn.**, *H. emunctus* re-described p. 30, AMARAL Proc. N. Eng. Zool. Club. **9**.

Typhlops walli **sp. n.** S. India, PROCTER Ann. Mag. N.H. s. 9, **13** p. 139.

Typhlops lumbricalis, allied species and their synonomies, COCHRAN **102**.

GLAUCONIIDAE.

Glauconia okahandjana **sp. n.** S. W. Africa, AHL Arch, Natg. Berlin A **90** p. 247. *G. borrichiana* **sp. n.** Argentina DEGERBØL Videns. Medd. Nat. For. Kjøbenhavn **76** p. 113 figs.

BOIDAE.

(PYTHONINAE.)

Python molurus swallowing *Varanus*, BEADON **52**.

(BOINAE.)

Boa imperator in bananas, GUTHRIE 194.

UROPELTIDAE.

Silybura macrolepis burrow and habits of, MCCANN **306**.

Brachyophidium Wall = *Platyplectrurus* Gthr. notes and discussion, PROCTER Ann. Nag. N.W. s. 9, **13** p. 141.

COLUBRIDAE.

(COLUBRINAE).

Tropidonotus ornaticeps **sp. n.** N Hainan, China, WERNER Sitz-ber Ak. Wiss. Wien **133** p. 30.

Natrix cyclopion, rhombifer, clarkii, fasciatus, erythrogaster, variation, pattern, etc., VIOSCA **513**.

Procteria viridis **gen.** et **sp. n.** German S. W. Africa [allied to *Pseudoxenodon*], WERNER Sitzber. Ak. Wiss. Wien. **133** p. 48.

Nerophidion hypsirhinoides **gen.** et **sp. n.** loc. ign. (nearest *Hydraethiops*), WERNER Sitz.-ber. Ak. Wiss. Wien **133** p. 53.

Tretanorhinus mocquardi Bocourt = *T. nigroluteus* Cope, AMARAL **20.**

Amastridium revised; synonomy and notes, *Mimometopon sapperi* (Werner) placed in *Amastridium. A. veliferum,* and *sapperi* re-described, DUNN Proc. U. S. Nation. Mus. Washington **65** (11) pp. 1–3.

Amphiardis inornatus Garman = *Potamophis striatulus* L., BLANCHARD Copeia **134** p. 83.

Pachyophis temporalis **gen.** et **sp. n.** loc. ign. [near *Hydrablabes*], WERNER Sitz.-ber. Ak. Wiss. Wien. **133** p. 49.

Stegonotus dorsalis **sp. n.** loc. ign., *S. poechi* **sp. n.** N. Guinea, WERNER Sitz-ber. Ak. Wiss. Wien. **133** p. 32.

Zaocys carinatus from Siam, JOYNSON **246.**

Phrynonax shropshirei **sp. n.** Panama, AMARAL Occ. Pprs. Boston Soc. Nat. Hist. **5** p. 131.

Coluber ravergieri ravergieri Ménétriés, MERTENS **326** pl. 12; *C. walli* **sp. n.** loc. ign., WERNER Sitz.-ber. Ak. Wiss. Wien. **133** p. 34.

Pseuduromacer lugubris **gen.** et **sp. n.** San Paulo, Brazil [between *Coluber* and *Uromacer*], WERNER *t.c.* p. 52.

Herpetodryas annectens **sp. n.** ? Brazil, WERNER *t.c.* p. 33.

Liophis cursor **sp. n.** Granada, WERNER *t.c.* p. 36.

Cyclagras gigas hood, behaviour, photo, PROCTER **394.**

Rhadinaea albiceps **sp. n.** Ecuador ?, AMARAL J. Washington Acad. Sci. **14** p. 200.

Lampropeltis thayeri **sp. n.** Mexico, LOVERIDGE Occ. Pprs. Soc. Nat. Hist. Boston **5** 1924 p. 137.

Diadophis amabilis similis, type locality, BLANCHARD **60.**

Holarchus purpurascens in Singapore, SWORDER **485.**

Oligodon rhombifer **sp. n.** Padang, WERNER Sitz.-ber. Ak. Wiss. Wien. **133** p. 36; *O. annulifer* (Blngr.) var. *confluens* **n. var.** Padang., WERNER *t.c.* p. 37.

Contia collaris Ménétriés, MERTENS **326** pl. 12.

Argyrogena rostrata **gen.** et **sp. n.** loc. ign. [near *Contia*], WERNER Sitz.-ber. Ak. Wiss. Wien. **133** p. 50.

Triaenopholis arenarius **gen.** et **sp. n.** loc. ign. [near *Contia*], WERNER *t.c.* p. 50.

Atractus paraguayensis **sp. n.** Paraguay, WERNER *t.c.* p. 40.

Padangia pulchra **gen.** et **sp. n.** Padang, Sumatra [nearest *Idiopholis*], WERNER Sitz-ber. Ak. Wiss. Wien. **133** p. 54.

Calamaria Boie, 1827 (*calamaria*), to be retained, STILES **473**; *C. lumholtzii* **sp. n.** Borneo, ANDERSSON Nyt. Mag. Nat. Kristiania **61** p. 123; *C. bruegeli* **sp. n.** Central Borneo, MERTENS Zool. Anz. Leipzig **60** p. 158.

(DIPSADAMORPHINAE.)

Tarbophis nigriceps Mesopotamia, *T. splendidus* S. Africa, **spp. nn.,** AHL Arch. Natg. Berlin A **90** p. 246; *T. fallax syriacus* notes on, MERTENS **322.**

Trimorphodon vandenburghi **sp. n.** California, KLAUBER Bull. Zool. Soc. San Rigo **1** p. 17.

Lycognathus rhombeatus Ptrs. = *L. germinatus* D. and B., MÜLLER Mitt. Zool. Mus. Berlin **11** p. 87.

Barbourina **gen. n.** *equatoriana* **sp. n.** Ecuador [allied to *Pseudoboa* Schn.], AMARAL J. Washington Acad. Sci. **14** p. 201.

Philodryas argentinus **sp. n.** Argentina, MÜLLER Mitt. Zool. Mus. Berlin **11** p. 90.

Rhamphiophis septentrionalis, Angel = *Cœlopeltis moilensis* Reuss., ANGEL Bull. Mus. Hist. Nat. Paris **1924** p. 270.

Psammophis key to Angolan spp., *P. rohani* **sp. n.** Angola, ANGEL Mission Rohan-Chabot Angola et Rhodesia Paris, 1923 **4** (1) p. 167 fig.

Mike elegantissima **gen.** et **sp. n.** loc ign. [allied to *Psammophis*], WERNER Sitz.-ber. Ak. Wiss. Wien. **133** p. 52.

Oxybelis argenteus tongue, behaviour, PROCTER **394**.

Apostolepis sanctae-ritae **sp. n.** Brazil. WERNER Sitz.-ber. Ak. Wiss. Wien, **133** p. 43.

Elapomorphus suspectus **sp. n.** Argentina, AMARAL J. Washington Acad. Sci. **14** p. 202.

Aparallactus graueri **sp. n.** Central Africa, WERNER Sitz-ber. Ak. Wiss. Wien. **133** p. 42.

(HYDROPHIINAE.)

Lioselasma lapemidoides (Gray), notes on, WALL **526**.

Laticauda schistorhynchus Gthr cind, *L. semifasciata* Reinw., notes on, VAN DENBURGH **505**.

(ELAPINAE.)

Naja haie eggs, ANGEL **28**; *N. tripudians* photo and notes of living albino specimen, PROCTER **394**; *N. bungarus* = *N. hannah* (Cantor) notes, habits, etc., WALL **524**.

Eminophis lineolata **gen.** et **sp. n.** ? East Africa [allied to *Poecilopholis*], WERNER Sitz.-ber. Ak. Wiss. Wien. **133** p. 55.

Elaps corallinus habits of, *E. marcgravii* bite of, MOLE 332.

AMBLYCEPHALIDAE.

Sibynomorphus macrostomus **sp. n.** Ecuador, AMARAL J. Washington Acad. Sci. **14** p. 200.

Cochliophagus isolepis, C. tornieri **spp. nn.** S. America, MÜLLER Mitt. Zool. Mus. Berlin **11** pp. 91, 92.

VIPERIDAE.

(VIPERINAE.)

Vipera berus, colour variations, JENSEN **242**; poison apparatus, WOLTER **550**; *V. aspis*, variation, PHISALIX **381**; *V. berus, V. ammadytes* in Alps, WERNER **537**; *V. ammodytes transversovirgata* **subsp. n.** Transcaucasia, TZAREWSKY Bul. Acad. Sci. Russ. Petrograd p. 269.

(CROTALINAE.)

Bothrops, neotropical species distinguished, AMARAL **19**.

Lachesis mutus, eggs of, habits of, bite of; *L. atrox*, habits of, MOLE **332**.

Trimeresurus melanurus **sp. n.** Mexico, MÜLLER Mitt. Zool. Mus. Berlin **11** p. 92.

Crotalus L. 1758 (*horridus*) to be retained, STILES **473**.

†ORDER PYTHONOMORPHA.

(†LEPIDOSAURIA.)

†SUBORDER MOSASAURIA.

Taxonomy, phylogeny, convergience, horizons, etc., DOLLO **126**.

†MOSASAURIDAE.

†*Liodon anceps* from Cretaceous of Morocco, DEPÉRET et RUSSO **120**.

†GLOBIDENSIDAE.

†*Globidens alabamaensis* from Cretaceous in Belgium, DOLLO **126**.

†ORDER PTEROSAURIA.

Development, notes on Arthaber's paper, NOPCSA **360**.

†RHAMPHORHYNCHIDAE.

†*Anurognathus ammoni* **gen.** et **sp. n.** lithographic state (allied to *Rhamphorhynchus*), DÖDERLEIN Sitz-ber. Ak. Wiss. München **1923** p. 137.

†ORDER DINOSAURIA.

Distribution of, HAUGHTON **204**; in Utah, GILMORE **173**; Alberta, ABEL **3**; eggs, WOODWARD **551**.

†SUBORDER THEROPODA.

†*Tanystrophaeus*, spinal cord, EDINGER **138**.

†*Streptospondylus*, skull, PIVETEAU **384**.

†*Tyrannosaurus* foot-prints in coal mines, PETERSON **380**.

†*Thecodontosaurus browni, T. skirtopodus, T. minor* notes, *T. dubius* **sp. n.** Stormberg series, S. Africa, HAUGHTON Ann. S. Afr. Mus. **12** pp. 370–377.

†*Aristesaurus erectus*, van Hoepen, discussed, HAUGHTON *t.c.* p. 379.

†*Chirostenotes pergracilis* sp. n. Upper Cretaceous of Alberta, GILMORE Canada Geol. Surv. Mus. Bull. **38** p. 3 pls.

†*Massospondylus carinatus*, notes *M. harriesi* re-described, *M. schwarzi* sp. n. Stormberg Series of S. Africa, HAUGHTON Ann. S. Afr. Mus. **12** pp. 383–403.

†*Aetonyx palustris*, HAUGHTON *t.c.* p. 404.

†*Dromicosaurus gracilis*, HAUGHTON *t.c.* p. 405.

†*Plateosaurus stormbergensis* notes, *P. cullingworthi* **sp. n.** Stormberg Series of S. Africa, HAUGHTON Ann. S. Afr. Mus. **12** pp. 406–7.

†*Gryponyx africanus*, re-described, *G. transvaalensis* notes, *G. taylori* **sp. n.** Stormberg Series of S. Africa, HAUGHTON *t.c.* pp. 417–420.

Euskelesaurus browni notes, *E. africanus* **sp. n.** Stormberg Series of S. Africa, HAUGHTON *t.c.* p. 424.

†*Melanorosaurus* **gen. n.** *M. readi* sp. n. Stormberg Series of S. Africa [allied to *Gresslyosaurus* and *Euskelesaurus*], HAUGHTON *t.c.* p. 429.

†*Gigantoscelus molengraaffi*, HAUGHTON *t.c.* p. 427.

†*Eucnemesaurus fortis*, HAUGHTON *t.c.* p. 428.

†SUBORDER SAUROPODA.

†*Uintosaurus douglassi* type re-described, pls., HOLLAND 230.

†*Diplodocus*, skull of, HOLLAND **229.**

†SUBORDER ORNITHOPODA.

†*Prosaurolophus maximus* restoration, PARKS **372.**

†*Hypacrosaurus* skull and skeleton, GILMORE **172.**

Hadrosauridae; chronological list of spp., vertebrae, GILMORE Canada Geol. Surv. Bull **38.**

†*Thespesius edmontoni* **sp. n.** Upper Cretaceons of Alberta, GILMORE *t.c.* p. 14 pls.

†*Stephanosaurus*, compared with *Lambeosaurus; L. lambei* Parks type re-described, GILMORE *t.c.* p. 29.

†*Geranosaurus atavus*, HAUGHTON Ann. S. Afr. Mus. **12** p. 436.

†SUBORDER STEGOSAURIA

†*Eoceratops candensis* **gen.** et **sp. n.** Cretaceous of Canada, LAMBE Canada Geol. Surv. Mus. Bul. **12** (1915).

†SUBORDER PROTOCERATOPSIA.

†*Protoceratops* and other mongolian spp., habits, formations, OSBORN 367.

†SUBORDER ANKYLOSAURIA.

†*Dyoplosaurus acutosquameus* **n. gen. n. sp.** (Cretaceous of Alberta, Canada), PARKS Univ. Toronto Sutdies. Geol. ser. **18** 1924 p. 1.

ORDER EMYDOSAURIA.

Osteology, MÜLLER **335**; Crocodilia of S. America, MÜLLER **339.**

†*Thoracosaurus scanicus* **sp. n.** Danian of Sweden, TROEDESSON Geol. For. Förh. Stockholm **45** 1923 p. 549 figs.

Crocodilus, moreletii, C. rhombifer, C. intermedius, C. acutus, keys, variation ethology, SCHMIDT (K.P.) **435**; *C. porosus* 29 ft. long, BARBOUR **43.**

†*Crocodilus nathani* **sp. n.** recent, alluvial, N. Queensland, LONGMAN Mem. Queensland Mus. **8** 1924 p. 23.

Alligator Cuv., 1807 (*mississipiensis*) to be retained, STILES **473**; *A. mississipiensis* leaflet on, SCHMIDT (K.P.) **434.**

Caiman intromittent organ of, REESE **409.**

†*Phobosuchus* **nom. nov.** for *Pinosuchus* (*s. Emysuchus, Gryponyx*), NOPCSA **361.**

†TELEOSAURIDAE.

†*Dyrosaurus* **sp.** from Cretaceous of Morocco, DEPÉRET et RUSSO 120.

†*Erythrochampsa* **gen.** for *Notochampsa longipes*, HAUGHTON Ann. S. Afr. Mus. **12** p. 367.

†SUBORDER EOSUCHIA.

†Eosuchidae.

INCERTAE SEDIS.

†*Eosuchia*, structure of, Broom 83.

†*Tangasaurus mennelli* **gen. n.** et **sp. n.** Middle Beaufort Beds E. Africa, (a primitive Diapsid nearest *Youngina*), Haughton Q. J. Geol. Soc. London **80** p. 8.

†Chasmatosauridae **fam. n.** for †*Chasmatosaurus vanhoepeni* **gen.** et **sp. n.** (between *Youngina* and *Erythrosuchus*) Middle Beaufort Beds of Harrismith, Haughton Ann. Transvaal Mus. Pretoria **11** 1924 p. 93.

†*Sphenosuchus acutus*, Haughton Ann. S. Afr. Mus. **12** p. 344.

†ORDER DIAPTOSAURIA.

†Mesosuchidia **suborb. n.** for †Mesosuchidae **fam. n.** for †*Mesoschus browni* Watson, skull, etc., described and compared with other forms, Haughton Trans. R. Soc. S. Africa **12** (2) pp. 17–27 pls. 1–2.

† Notochampsidae **fam. n.** for *Notochampsa isteduna* Broom, Haughton Ann. S. Afr. Mus. **12** p. 358.

†*Pedeticosaurus leviseuri*, Haughton S.H. Ann. S. Afr. Mus. **12** p. 366.

ORDER RHYNCHOCEPHALIA.

Sphenodon punctatus, development of auditory apparatus, visceral pouches, aortic arches, Wyeth **554**; fore-brain development, Wyeth **553**; habits in captivity, Krull **277**.

ORDER PELYCOSAURIA.

†*Dimetrodon* skull, Case 93.

†Edaphosauridae.

†*Noasaurus* **nom. nov.** for *Edaphosaurus, N. uralensis* **sp. n.** Permo-carboniferous of the Urals, Riabinin Bull. Com. Geol. Petrograd **34** 1915 pp. 385–395.

†*Melosaurus uralensis* internal parts of skull, Riabinin 413.

ORDER CHELONIA.

Faunal list, Russia, Nikolsky **350**; Tibet and China, Vogt **516**.

Fossil fauna of upper Jurassic of N.W. Germany, Oertel **364**.

SUBORDER ATHECAE.

Dermochelys Blainv. 1816 (*coriacea*) to be retained, Stiles **473**; *D. schlegelii* 5th record, Van Denburgh **506**.

SUBORDER THECOPHORA.

Acichelyidae.

†*Thalassemys heusseri* **sp. n.** Upper Jura of N.W. Germany, Oertel Palaeont. Zs. Berlin **6** p. 67.

Chelydridae.

Chelydra Schweigg. 1812 (*serpentina*) to be retained, Stiles **473**.

Testudinidae.

Chrysemys marginata bellii, habits and nest, Thacker **488**.

Terepene carolina drinking habits, Breder (R.B.) **75**.

Testudo ibera with abnormal shell, Flower **154**; giant spp. of the Galapagos, *T. ephippium*, ethology, photos, Beebe **54**; *T. procterae*, *T. loveridgii*, remarks, De Witte **549**; *T.* Blgr. = *T. tornieri* Siebr., Wettstein-Westersheim **540**; †*T. bessarabica* *T. tarakliensis* **spp. nn.** Tertiary of Bessarabia, Riabinin Trav. Mus. Geol. Min. Emp. P. le G. Acad. Sci. Russ. Petrograd **1915** pp. 6–12.

†Plesiochelyidae.

†*Plesiochelys oblonga* p. 69 *P. pumilio* p. 71 **spp. nn.**, *P. solodurensis langenbergensis* p. 43 **var. n.**, Jurassic of N.W. Germany; *P. hannoverana* *P. minor*, *P. solodurensis* notes on, Oertel Palaeont. Zs. Berlin **6** p. 43 figs.

Pelomedusidae.

Sternothaerus heinrothi **sp. n.** Cameroons, Kanberg Zool. Anz. Leipzig **60** p. 195.

Trionychidae.

†*Trionyx sp.* from Cretaceous of Denmark, Rosenkrantz Medd. Geol. Kjøbenhaven **6** (19) 1923, p. 8 figs.; *T. ferox* Schneid. = *T. ferox* Agassiz = *T. spiniferus agassizii* Baur, Siebenrock **448**.

Amyda emoryi from Arizona, Schmidt (K.P.) 436.

†ORDER ICTHYOPTERYGIA.

†SUBORDER ICTHYOSAURIA.

†*Icthyosaurus* soft tissues of paddlles, ANDREWS **27**.

†ORDER SAUROPTERYGIA.

†SUBORDER PLESIOSAURIA.

Phylogeny and anatomy of shoulder girdle, WATSON **529**.

†*Cimoliasaurus andium*, vertebrae finds, SCHNEIDER **438**.

†*Elasmosauria*, geological distribution, PRAVOSLAVLEV **392**.

†*Elasmosaurus* Cope shoulder girdle described and figured, PRAVOSLAVLEV **391**.

†PLIOSAURIDAE.

†*Kronosaurus queenslandicus* **gen.** et **sp. n.** Cretaceous of Queensland, LONGMAN Mem. Queensland Mus. **8** 1924 p. 26.

†NOTHOSAURIDAE.

†*Proneusticosaurus carinthiacus* **sp. n.** ARTHABER Act. Zool. Stockholm **5** 1924 p. 509.

†*Eurysaurus schafferi* **sp. n.** ARTHABER *t.c.* p. 476.

†*Phygosaurus* **gen.** *perledicus* **sp. n.** for *Lariosaurus balsami* Cur., ARTHABER *t.c.* p. 403.

†*Lariosaurus balsami*, Cur. figured and described, MARIANI, **313**.

†ORDER THERIODONTIA.

Of the Stormberg Series, S. Africa, HAUGHTON Ann. S. Afr. Mus. **12** p. 340.

†SUBORDER GORGANOPSIA.

†*Inostranzevia alexandri* **gen. n., sp. n.** allied to *Gorgonops*. Upper Permian of North Dvina, AMALITZKY Bull. Acad. Sci. Russ. Petrograd **1922** p. 336.

†*Galesuchus gracilis* skull, HAUGHTON Ann. S. Afr. Mus. **12** p. 499.

†*Scylacops capensis*, HAUGHTON *t.c.* p. 501.

†*Aelurognathus* **gen. n.** for *Scymnognathus tigriceps*, Haughton and Broom; *Aserratidens*, Haughton, HAUGHTON *t.c.* p. 503.

†*Gorgonognathus longifrons*, type skull HAUGHTON *t.c.* p. 505.

†*Arctognathus whaitsi* **sp. n.**, HAUGHTON *t.c.* p. 507.

†*Sycosaurus* **gen. n.**, *S. laticeps* **sp. n.**, HAUGHTON *t.c.* p. 509.

†ORDER ANOMODONTIA.

Alisphenoid bone in Therapsid Reptiles, GREGORY & NOBLE **183**.

†SUBORDER CYNODONTIA.

Tritheledon riconoi, maxilla, HAUGHTON *t.c.* p. 342.

†*Dvinia prima* **n. gen. n. sp.** near *Tritheledon* Broom. Upper Permian of North Dvina, AMALITZKY Bull. Acad. Sci. Russ. Petrograd **1922** p. 337.

†*Lycorhinus angustidens* **gen.** et **sp. n.** Stormberg Series, S. Africa, HAUGHTON Ann. S. Afr. Mus. **12** p. 343.

†*Ictidopsis elegans* Broom, Osteology, HAUGHTON **202**.

†*Glochinodontoides gracilis* **gen.** et **sp. n.** Middle Beaufort Beds of Harrismith (near *Ictidopsis*), HAUGHTON Ann. Transvaal Mus. Pretoria **11** 1924 p. 85.

†*Glochinodon detinens* osteology, HAUGHTON **202**.

†*Platycraniellus elegans* osteology, HAUGHTON **202**.

†SUBORDER THEROCEPHALIA.

†*Anna petri* **gen. n. sp. n.** allied *Scylacosaurus* Broom, Upper Permian of North Dvina, AMALITSZY Bull. Acad. Sci. Russ. Petrograd **1922** p. 336.

†SUBORDER DICYNODONTIA.

†*Kannemeyeria*, skull of, PEARSON **376**; reconstruction of, PEARSON, **377**.

†*Dycynodon trautscholdi* **sp. n.** Upper Permian of North Dvina, AMALITZKY Bull. Acad. Sci. Russ. Petrograd **1922** p. 332.

†*Gordonia rossica* **sp. n.** Upper Permian of North Dvina, AMALITZKY *t.c.* p. 333.

†*Oudenodon venyukovi* **sp. n.** Upper Permian of North Dvina, AMALITZKY *t.c.* p. 334.

†ORDER COTYLOSAURIA.

†SEYMOURIDAE.

†*Seymouria.*

†*Kotlassia* **sub. gen.** *prima, K. secunda* **spp. nn.** Permian of N. Russia, AMALITZKY Ann. Mag. N. H. s. 9 **13** pp. 64–77.

SUBORDER PAREIASAURIA.

†*Pareiasaurus* skull of, BROOM **81.**

BATRACHIA.

Systematic.

Summary since 1918, BERTIN **57**; Relationships and classification of, MIRANDA-RIBEIRO **330.** Spp. in the Bosnian - Hercegovinian Museum, BOLKAY **66**; in the London Zoo, MERTENS **325.**

Complete Faunal Works.

Of the Belgian Congo, check list of African spp., ethology, variation, distribution, NOBLE Bull. Amer. Mus. **59** pp. 147–347 pls. 23–42.

N.E. and E. France, LANTZ **290**; N.E. France and Belgium, SCHREITMÜLLER **441**; Hungary, MÉHELY **320**; Russia, NIKOLSKY **352**; Handbook to spp. round Moscow (?), TERENTJEV **487** (Russian); Wilmington, N. Carolina, MYERS **342**; S. Dakota, OVER **369**; New Mexico, VAN DENBURGH **503**; Sakhalin Island, VAN DENBURGH **504.**

Collections and Notes.

N.E. Africa and Arabia, AHL **9**; C. Russia, CZAREWSKY **112**; Tibet and China, VOGT **516**; S. and S.-W. Australia, KINGHORN **253**; Haiti, COCHRAN **101**; S. Carolina, SCHMIDT (K.P.) **437**; Alabama, HOLT **231, 232.**

ORDER ECAUDATA.

Check-list of African spp., NOBLE **356.**

Synoptic key to eggs of U.S.A. spp., WRIGHT, Amer. Nat. **58** p. 375 pl.

Tree-frogs from Indo-China, SMITH (M. A.) **453**; Wood-frogs of Japan, STEJNEGER **468.**

Reply on osteology and systematics, BOLKAY **65.**

FIRMISTERNIA.

RANIDAE.

Ranidae of Germany, comparative physiology, ZEPP **558.**

Rana, seasonal sexual variation in fore-limb skeleton, DANWART **114**; *R. esculenta,* blue specimen, DESPAX **121**; *R. fusca,* development of internal ear, EISINGER et STERNBERG **140**; *R. macrodon* **var.,** *leporina* **n.,** Borneo, ANDERSSON Nyt. Mag. Nat. Kristiania **61** p. 124; *R. pipiens* digestive tract in metamorphosis, KUNTZ **282**; abnormal arteries in, YOUNG **556**; *R. boylei sierrae* **subsp. n.** Yosemite, GRINNELL et STORER, Animal Life in the Yosemite, San Francisco **1924**; *R. palmipes hoffmanni* **subsp. n.** Costarica, MÜLLER Mitt. Zool. Mus. Berlin **11** p. 80; *R. weigoldi* **sp. n.** Central Asia, VOGT Zool. Anz. Leipzig **60** p. 339; *R. canagica* Pallas original description, LINDHOLM **298**; *R. neumanni, R. erlangeri* **spp. nn.** N.E. Africa, AHL Mitt. Zool. Mus. Berlin **11 1** H 1923 pp. 4–5.

†*R. hipparionum* remains in Tertiary of Mongolia, SCHLOSSER **433.**

Ranosoma **gen. n.** *schereri* **sp. n.** Senegal [allied to *Rana*], AHL Arch. Natg. Berlin A **90** p. 250.

Montorana ahli **gen.** et **sp. n.** China [allied to *Rana* and *Tomopterna*], VOGT Zool. Anz. Leipzig **60** p. 341.

Platymantis, synonomy, BARBOUR **42.**

Cornufer, synonomy, BARBOUR **42.**

Rhacophorus chaseni Malay, p. 226, *Rh. notater* p. 227, *Rh. calcaneus* p. 228, *Rh. annamensis* p. 229 Annam **spp. nn.** Smith (M. A.) P.Z.S. **1924** pls. 1–2; *Rh. prominanus* **sp. n.** Perak, SMITH (M. A.) J. Fed. Mal. Mus. **11** p. 185; *Rh. pleurostictus batangensis* **subsp. n.** China, VOGT Zool. Anz. Leipzig **60** p. 341.

Petropedetes obscurus **sp. n.** Central Africa, AHL Zool. Anz. Leipzig **58** p. 81.

Rappia montana sp. n. Brit. E. Africa, ANGEL Bull. Mus. Hist. Nat. Paris **1924** p. 269.

Hyperolius langi sp. n. Belgian Congo, NOBLE Bul. Amer. Mus. Nat. Hist. **49** p. 266 pl. 39.

Megalixalus maculifer sp. n. N.E. Africa, AHL Mitt. Zool. Mus. Berlin 11. **1** H 1923 p. 7.

Hylambates. Leptopelis nanus sp. n. Togo, AHL Arch. Natg. Berlin A. **90** p. 252.

Philautus laevis p. 230, *Ph. gryllus* p. 231, *Ph. palpebralis* p. 233 spp. nn. Annam, SMITH (M. A.) P.Z.S. 192 pls. 2–3.

Pseudocassina gen. n. *ocellata* sp. n., *Ps. rugosa* sp. n. N.E. Africa [allied to *Cassina*], AHL Mitt. Zool. Mus. Berlin 11 **1** H 1923 p. 8.

Arthropleptis dendrobates Boulenger referred to *Phrynobatrachus*, NOBLE Bul. Amer. Mus. Nat. Hist. **49** p. 195; *A. methneri*, *A. albifer* Dutch E. Africa, *A. brevipes* Togo spp. nn., AHL Arch. Natg. Berlin A **90** pp. 251–252.

Phrynopsis usambarae sp. n. Tanganyika, AHL Zool. Anz. Leipzig **60** p. 271.

Phrynobatrachus wittei, *P. kinangopensis* spp. nn. B.E.A., ANGEL Bull. Mus. Hist. Nat. Paris **1924** pp. 130–131; *P. versicolor* Tanganyika p. 100, *P. petropedetoides* L. Albert Edward p. 102, *P. vogti* Bontry p. 103, spp. nn., AHL Zool. Anz. Leipzig **61**; *P. latifrons* sp. n. Cameroons, *P. perpalmatus werneri* subsp. n. A.-E. Sudan, AHL Zool. Anz. Leipzig **60** pp. 272–3.

ENGYSTOMATIDAE.

Tornierella gen. *pulchra* sp. n. Somaliland [allied to *Dyscophus* and *Calluella*], AHL Mitt. Zool. Mus. Berlin 11, **1** H 1923 p. 10.

Microhyla grahami n. sp. Suifu, Szechwan p. 119, STEJNEGER Occ. Papers. Bost. Soc. Nat. Hist. Boston **5** 1924 p. 119.

Spelaeophryne gen. n. *methneri* sp. n. [allied to *Otophryne* Blgr.] E. Africa, AHL Zool. Anz. Leipzig **61** p. 99.

Dasypops gen. *schirchi* sp. n. Brazil [allied to *Hemisus*], MIRANDA-RIBEIRO Bol. Mus. Nacion. Rio Janeiro **1** p. 255, fig.

Nectodactylus gen. n. *spinulosus* sp. n. Brazil [allied to *Chiasmocleis*], MIRANDA-RIBEIRO Bol. Mus. Nacion. Rio Janeiro **1** p. 256.

ARCIFERA.

Distribution and origin, HEWITT **224**.

CYSTIGNATHIDAE.

Distribution and origin, HEWITT **224**.

Batrachophrynus brevipalmatus sp. n. Bolivia, MÜLLER Mitt. Zool. Mus. Berlin **11** p. 78.

Elosia aspera sp. n. Brazil, MÜLLER Senkenberg **6** p. 173.

Phyllobates talamancae, *P. latinasus* colouration, sexual dimorphism, etc., *P. nubicola* sp. n. Panama, DUNN Occ. Pprs. Mus. Zool. Michigan **151** pp. 1–16; *P. beatriciae* Barbour and Dunn = *Dendrobates lugubris* Schmidt = *Ph. lugubris*, DUNN **133**.

Eleutherodactylus goldmani sp. n. Panama, NOBLE Proc. Biol. Soc. Washington, **37** p. 67.

Ceratophrys, anatomy, RAU **406**.

Paludicola bresslaui sp. n. Brazil, MÜLLER Senkenberg. **6** p. 175.

Leptodactylus Brazilian spp. LUTZ **304**.

Borborocœtes stejnegeri sp. n. Brazil, (1500 m.), NOBLE Proc. Biol. soc. Washington, **37** p. 68.

Crossodactylus bresslaui, *C. æneus*, spp. nn. Brazil, MÜLLER Senkenberg. **6** p. 169, 171.

HYLIDAE.

Distribution and origin, HEWITT **224**.

Hyla spp. from Rio de Janeiro, LUTZ **305**; *H. ehrhardti* sp. n. Brazil, MÜLLER Zool. Anz. Leipzig **59** p. 233; *H. raddiana andina* subsp. n. Argentina, MÜLLER Mitt. Zool. Mus. Berlin **11** p. 75; *H. ohausi* Wandollek, described, MÜLLER **340**; *H. evansi* photo of live ♀ and eggs, LANG **285**; *H. uranochroa*, *H. albomarginata* nest, eggs and tadpole development, DUNN **133**; *H. africana* sp. n. Togo, AHL Arch. Natg. Berlin A

90 p. 254; *H. blandsuttoni* **sp. n.** Australia, PROCTER P.Z.S. 1924 p. 1128 pl. iii; *H.* (*Hylella*) *uranoscopa* **sp. n.** Brazil MÜLLER zool. Anz. Leipzig **59** p. 234.

Phyllomedusa **spp.** from Rio de Janeiro, LUTZ **305.**

Phrynomedusa allied to *Phyllomedusa*, *Phrynomedusa fimbriata* **sp. n.** Brazil, MIRANDA-RIBEIRO Bol. Mus. Nacion Rio de Janeiro **1** p. 3.

BUFONIDAE.

Distribution and origin, HEWITT **224.**

Bufo vulgaris japonica, complete account of metamorphosis, SATO **430**; *B. viridis* notes on living examples in Mesopotamia, MERTENS **326**; *B. mocquardi* **sp. n.** Brit. E. Africa, ANGEL Bull. Hist. Nat. Paris **1924** p. 270; *B. togoensis* **sp. n.** Togo, AHL Arch. Natg. Berlin A. **90** p. 253; *B. brevipalmata* **sp. n.** Somaliland, AHL Mitt. zool. mus. Berlin **11** 1924 p. 11; *B. canorus* **sp. n.** Yosemite, GRINNELL et STORER, Animal Life of the Yosemite, San Francisco, **1924.**

PELOBATIDAE.

Summary and evolution of, NOBLE **353**; Distribution and origin, HEWITT **224.**

†*Macropelobates* **gen. n.** *osborni* **sp. n.** Oligocene of Mongolia [allied to *Pelobates* and *Scaphiopus*], NOBLE Amer. Mus. Novit. **132** pp. 1–15 figs. 1–7.

LIOPELMIDAE **fam. n.** for *Liopelma* and *Ascaphus*, NOBLE Amer. Mus. Novit. **132** p. 9.

Megalophrys weigoldi **sp. n.** *loc. ign.*, VOGT Zool. Anz. Leipzig **60** p. 343.

DISCOGLOSSIDAE.

Distribution and origin, HEWITT **224.**

Alytes obstetricans, organogeny of, FAHRENHOLZ **147.**

Barbourula **gen.** *busuangensis* **sp. n.** Philippine Ids., NOBLE Amer. Mus. Novit. **121** p. 1 fig.

PIPIDAE.

Pipa snethlageae Parà Brazil described, MÜLLER **338**; *P. aspera* **sp. n.** Surinam, MÜLLER zool. Anz. Leipzig **58** p. 291.

Hymenochirus curtipes **sp. n.** Congo, NOBLE Bul. Amer. Mus. Nat. Hist. **49** p. 155 pl. xxiii.

Xenopus, shoulder-girdle discussed, VILLIERS **512**; *X. lævis* cutaneous sense-organs, CALABRESI **92**; anatomy of, GROBBELAAR **185**; *X. victorianus* **sp. n.** Lake Victoria Nyanza, AHL zool. Anz. Leipzig **60** p. 270.

ORDER CAUDATA.

Check-list of African spp., NOBLE **356**; ethology of New York spp. BISHOP **59.**

SALAMANDRIDAE.

(SALAMANDRINAE.)

Salamandra development of skull, STADTMÜLLER **466**; *S. maculosa*, experiments on coloration, HERBST **214**; *S. semenovi* **sp. n.** Kurdistan, NESTEROV Ann. Mus. zoo. Acad. Petrograd **21** 1916.

Molge reiseri larva of, BOLKAY **66.**

Notophthalmus viridescenes life-history, sense of smell, POPE **289**, feeding habits in metamorphosis, BREDER, **74.**

†*Triton* sp. remains in Tertiary of Mongolia, SCHLOSSER **433.**

Triton asper, altitude and breeding season, DESPAX **123.**

Pseudotriton montanus, distribution, BRADY **73.**

Euproctus montanus distribution, DESPAX **122.**

Pleurodeles wahlti coloration of, KOPPÁNYI **264.**

Tylotriton verrucosus ova, larvae, metamorphosis, SMITH (M. A.) **455.**

Rhithotriton **gen. n.** *R. derjugini* sp. n. Kurdistan, NESTEROV Ann. Mus. zool. Acad. Petrograd **21** 1916.

(AMBLYSTOMATINAE.)

Amblystoma, pigment study; FARIS **148**; *A. tigrinum* digestive tract in metamorphosis, KUNTZ **282**; "balancer" in larvae, NICHOLAS **349**; habits, PATCH et STEWART **373**; *A. opacum*, life-history, VIOSCA jr. **514.**

(PLETHODONTINAE.)

Oedipus, key to spp. *O. schmidti*, *O. coloneus*, *O. nasalis* **spp. nn.** C. America *Oedipina* = *Oedipus*, DUNN Field Mus. Publ. zool. ser. **12** (7) pp. 95–100; *O. complex* **sp. n.** Panama, DUNN Occ. Pprs. Boston Nat. Hist. soc. **5** p. 94.

Eurycea bislineata life - history, WILDER **542**; praemaxillary of, WILDER **543**; *E. platycephalax* **sp. n.** Yosemite, relationships, GRINNELL et STORER, Animal Life in the Yosemite, San Francisco **1924**.

(DESMOGNATHINAE.)

Desmognathus, ethology and egg-laying, POPE **388**; *Desmognathus* Baird 1849 to be retained, STILES 473.

Leurognathus, ethology, egg-laying, POPE - **388**; *L. marmorata* Moore, vomerine teeth present, DUNN **136**.

AMPHIUMIDAE.

Megalobatrachus sligoi **sp. n.** China, BOULENGER (E. G.) P.Z.S. 1924 p. 173.

Cryptobranchus Lenck., 1821, (*gig antea* = *alleganiensis ; alleghaniensis*) to be retained, STILES **473**.

PROTEIDAE.

Necturus maculosus, *N. punctatus* Notes on, BRIMLEY **80**.

Proteus anguinus, skull, DOLIVO-DOBROVOLSKY **125**.

SIRENIDAE.

Retrograde metamorphosis of, NOBLE **357**.

Siren L. (*lacertina*) to be retained, STILES **473**; *S. lacertina*, terrestrial form, VIOSCA jr. **515**; herbivorous ? DUNN **132**.

ORDER APODA.

Check-list of African spp. NOBLE **356**.

Ichthyophis, tentacles and eye, ENGELHARDT **144**.

Hypogeophis respiration, MARCUS **312**.

Gymnophis nicefori **sp. n.** Colombia, BARBOUR Proc. Biol. Soc. Washington **37** p. 125.

Siphonops parviceps **sp. n.** Panama, DUNN Occ. Pprs. Boston Nat. Hist. Soc. **5** p. 93.

†ORDER STEGOCEPHALIA.

Tetrapod shoulder-girdles, ROMER **418**.

†*Limnopus* ? *coloradensis* **sp. n.**, HENDERSON J. Geol. Chicago **32** p. 228 figs.

†DVINOSAURIDAE **fam. n.** †*Dvinosaurus* **gen. n.** *D. primus*, *D. secundus*, *D. tertius*, **spp. nn.**, Permian of N. Russia, AMALITZKY Ann. Mag. N.H. e.g. **13** pp. 50–64 pl. i; notes on genus, SUSHIAN **478**.

†MASTODONSAURIDAE.

†*Mastodonsaurus cappelensis* **sp. n.** Permian of Germany, WEPFER Monogr. Geol. Palaeont. Berlin s. 2 **1923** p. 42.

XV. AVES

ARRANGED BY

W. L. SCLATER, M.A.

CONTENTS.

	PAGE
I. Titles	1
II. Subject Index	40
III. Systematic	48

I.—TITLES.

1.—Acland, C. M. and **Salmon,** H. M. The Grassholm Gannets in 1924. A great increase. Brit. Bds. London **18** 1924 pp. 178–185 5 figs.

2.—Agar, W. E. Experiments with certain plumage colour and pattern factors in poultry. J. Genetics Cambridge **14** 1924 pp. 265–272.

Agassiz, A. *vide* Danchakoff.

3.—Alexander, G. Summer Birds of Cape Cod compared with those of Missouri. Wilson Bul. Oberlin **35** 1923 pp. 72–79.

4.—Alexander, H. G. The status of the Water-Pipit in England. Brit. Bds. London **17** 1924 pp. 304–305.

5.—Alexander, H. G. Birds of the Lake of Geneva. Ibis London **1924** pp. 277–281.

6.—Alexander, W. B. White's Journal of a voyage to New South Wales. Emu Melbourne **23** 1924 pp. 209–215. *See also* G. M. **Mathews** and E. R. **Waite** **24** p. 70 and **Alexander** **24** pp. 147–148.

7.—Alexander, W. B. Sonnerat's Voyage to New Guinea. Emu Melbourne **23** 1924 pp. 299–305 2 pls.

8.—Allen, A. A. A contribution to the life history and economic status of the Screech Owl (*Otus asio*). Auk Lancaster Pa. **41** 1924 pp. 1–16 5 pls.

9.—Almásy, G. von. Nekrolog: Viktor Ritter von Tschusi zu Schmidhoffen, 1847–1923. Aquila Budapest **30-31** 1924 pp. 363–370.

10.—Almásy, G. von. Storchzug über das Hochgebirge. Orn. Monatsb. Berlin **32** 1924 pp. 30–31.

11.—Alverdes, K. Der Nebenhoden des Haussperlings. Zs. mikr. anat. Forschung **1** 1924 pp. 207–227 7 text-figs; Verh. Anat. Ges. in Anat. Anz. **58** 1924 pp. 115–120 1 fig.

12.—Amar, J. Coagulation et structure de l'oeuf. C. R. Acad. Sci. Paris **178** 1924 pp. 803–805.

13.—Andersson, J. G. On the occurrence of fossil remains of Struthionidae in China. Mem. Geol. Surv. China Peking ser. A No. **3** 1923 pp. 53–77.

14.—Anon. Official Canadian record of Bird-banding returns. Canad. Field. Nat. Ottawa **38** 1924 pp. 91–93 133–135 154–157 177–179 190–191.

15.—Anon. Obituary, W. H. Dudley Le Soeuf. Emu Melbourne **23** 1924 pp. 238–240 portr.

16.—Archey, G. and **Lindsay,** C. Notes on the Birds of the Chatham Islands. Rec. Canterbury Mus. Christchurch N.Z. **2** 1924 pp. 187–201.

17.—Arlington, L. C. Birds in the poetry of the Chinese. China J. Sci. Arts Shanghai **2** 1924 pp. 210–218.

18.—Arnold, E. C. British Waders, illustrated in water-colour with descriptive notes. Pp. viii + 102 51 pls. in colour Cambridge (Univ. Press) sm. 4to.

19.—Arribalzaga, E. L. Nombres vulgares argentinos de las aves silvestres de la Republica. Hornero Buenos Aires **3** 1924 pp. 259–277.

20.—Arrigoni degli Oddi, E. Cenni sulla vita e sulle opere di Tommaso Salvadori. Pp. 1–51 portr. Messina (Tip. Guerriera) [1924] 8vo (with bibliography).

21.—Ashby, E. Notes on extinct or rare Australian Birds, with suggestions as to some of the causes of their disappearance. Emu Melbourne **23** 1924 pp. 178–183 294–298.

22.—Ashby, E. A review of the genus *Calamanthus*. Emu Melbourne **24** 1924 pp. 44–45.

23.—Ashby, E. Note on the discovery of *Malurus pulcherrimus* (Gould) in the State of South Australia. S. Austr. Orn. Adelaide **7** 1924 pp. 184–185.

24.—Ashby, E. *Gerygone fusca*: The Brown Warbler. S. Austr. Orn. Adelaide **7** 1924 p. 185.

25.—Ashby, E. Notes on Birds met with at Gosford and Port Stephens in New South Wales. S. Austr. Orn. Adelaide **7** 1924 pp. 186–193.

26.—Ashby, E. and others. Papers and opinions on the subject of private collecting. S. Austr. Orn. Adelaide **7** 1924 pp. 241–270.

27.—Astley, H. Thrushes (in aviculture). Avic ult.Mag. London (4) **2** 1924 pp. 206–218, Warblers, Robins, etc. pp. 227–235 col. pl.

28.—Astley, H. A hybrid Parrakeet. Avicult. Mag. London (4) **2** 1924 pp. 235–236 col. pl.

29.—Astley, H. D. The Yellow-naped Woodpecker (*Chrysophlegma flavinucha*). Avicult. Mag. London (4) **2** 1924 pp. 281–283 col. pl.

30.—Athanasiu, I. et **Pézard,** A. Influence de la castration sur l'energie nerveuse motrice. C.R. Acad. Paris **178** 1924 pp. 874–876.

31.—Averill, C. K. Vigor, distribution and pigmentation of the egg. Condor Berkeley Cal. **26** 1924 pp. 140–143.

32.—Bacmeister, W. Lassen sich die einzelnen Formen der Mattkopfmeisen auch an ihres Locktönen unterscheiden? Verh. Orn. Ges. Bayern München **16** 1924 pp. 51–53.

33.—Badertscher, J. A. Results following the extirpation of the pineal gland in newly hatched chicks. Anat. Rec. Philadelphia **28** 1924 pp. 177–197 4 figs.

34.—Bailey, A. M. Four species new to North America [*Dafila, Nettion, Pisobia, Calidris*]. Condor Berkeley Cal. **26** 1924 p. 195.

35.—Bailey, F. M. An Arizona valley bottom. Auk Lancaster Pa. **41** 1924 pp. 423–432.

36.—Bailey, H. H. The status of the Florida Crow (*Corvus brachyrhynchos pascuus*). Wilson Bul. Oberlin **35** 1923 pp. 148–149.

37.—Baker, E. C. S. The Fauna of British India, including Ceylon and Burma. Birds vol. ii 2nd ed. pp. xxiii + 561 8 col. pls. 86 textfigs London Taylor and Francis) 1924 8vo.

38.—Baker, E. C. S. New races of *Cisticola* and *Franklinia* and on the eggs of *Charadrius mongolus atrifrons*. Bul. Bt. Orn. Cl. London **44** 1924 pp. 38–40.

39.—Baker, E. C. S. Descriptions of new Warblers. Bul. Bt. Orn. Cl. London **44** 1924 pp. 61–63.

40.—Baker, E. C. S. A new race of *Suya crinigera.* Bul. Bt. Orn. Cl. London **44** 1924 pp. 80–81.

41.—Baker, E. C. S. A new race of *Psaroglossa.* Bul. Bt. Orn. Cl. London **45** p. 14.

42.—Baker, E. C. S. The Game Birds of India, Burma and Ceylon. Pt. xxxvii. J. Bombay Nat. Hist. Soc. **29** 1924 pp. 849–863 1 pl. Pt. xxxviii ibid **30** 1924 pp. 1–11 1 pl.

43.—Balsac, H. de. Voyages d'études ornithologiques dans la région nord du Sahara. Rev. Fr. d'Orn. Paris **16** 1924 pp. 264–266 282–289 303–306 322–332 338–357 372–392 433–446 maps and photos.

44.—Balsac, H. H. de. Note complémentaire sur les oiseaux de Riou. Rev. Fr. d'Orn. Paris **16** 1924 pp. 370–372 fig.

45.—Balsac, H. de. L'Ibis Chauve, *Comatibis eremita* (L.), en Algérie. Rev. Fr. d'Orn. Paris **16** 1924 pp. 469–474 1 photo.

Balsac, H. de. See also Heim de Balsac.

46.—Bangs, O. A new form of *Melanochlora sultanea* from Fukien. Proc. N. Engl. Zoöl. Cl. Cambridge Mass. **9** 1924 p. 23.

47.—Bangs, O. and **Penard,** T. E. The identity of *Trochilus ruckeri* Bourcier. Occ. Papers Boston Soc. N. H. **5** 1924 pp. 77–78.

48.—Bannerman, D. A. A new White-eye from Pemba I. Bul. Bt. Orn. Cl. London **44** 1924 p . 41.

49.—Bannerman, D. A. On two new African Barbets. Bul. Bt. Orn. Cl. London **44** 1924 pp. 100–101.

50.—Bannerman, D. A. A new *Bradornis.* Bul. Bt. Orn. Cl. London **45** pp. 41–42.

51.—Bannerman, D. A. A revision of the African Bulbuls (Pycnonotidae) in the British Museum, with a list of all species and subspecies contained in the collection. Rev. Zool. Afr. Tervueren **12** 1924 pp. 17–38.

52.—Bannerman, D. A. Important correction to my review of the races of *Tricholaema hirsutum.* Rev. Zool. Afr. Tervueren **12** 1924 pp. 482–486.

Bannerman, D. A. *vide* Bates.

Bannerman, D. A. *vide* Swann.

53.—Banzhaf, W. *Pastor roseus* (L.), auf Helgoland. Orn. Monatsb. Berlin **32** 1924 pp. 49–50.

54.—Banzhaf, W. Zur Invasion von *Phylloscopus inornatus inornatus* (Blyth) auf Helgoland im Herbst 1923. Verh. Orn. Ges. Bay. München **16** 1924 pp. 166–170.

55.—Banzhaf, W. und **Panzer,** W. Von Herbstvogelzug 1923 auf Helgoland. Orn. Monatsb. Berlin **32** 1924 pp. 72–75.

56.—Barford, K. Tredaekkeren (*Gallinago major*). Dansk. Orn. Tids. Kjøbenhavn **18** 1924 pp. 23–30.

57.—Barros, R. Aves del Valle de Nilahue. Rev. Chilena Santiago **24** 1921 pp. 139–152.

58.—Barros, R. Aves de la Cordillera de Aconcagua. Rev. Chilena Santiago **25** 1923 pp. 167–192 3 figs.

59.—Bartelmez, G. W. and **Riddle,** O. On parthenogenetic cleavage and on the rôle of water absorption by the ovum in the formation of the subgerminal cavity in the pigeon's egg. Amer. J. Anat. Philadelphia **33** 1924 pp. 57–66 2 figs.

60.—Bartels, M., Jr. Waarnemingen omtrent *Spizaëtus cirrhatus limnaëtus* Horsf. en *Spizaëtus nipalensis kelaarti* Legge op Java. Jaarb. Club Ned. Vogelk. Zevenbergen **14** 1924 pp. 11–21.

61.—Bartels, M. E. und H. Die javanischen Eier der Nehrkornschen Sammlung. Orn. Monatsb. Berlin **32** 1924 p. 109–111.

62.—Bartrum, J. A. Bones of the Moa in volcanic beds at Auckland. N. Zeal. J. Sci. Techn. Wellington **7** 1924 pp. 119–120.

63.—Bates, G. L. and **Bannerman,** D. A. On the birds collected in northwestern and northern Cameroon and parts of Northern Nigeria. Ibis London **1924** pp. 1–45 5 pls. 2 textfigs. pp. 199–277 1 pl. 3 textfigs. pp. 519–549.

64.—Bates, R. S. P. Birds' nesting with a camera in India. J. Bombay Nat. Hist. Soc. **29** 1924 pp. 947–957 10 photos; **30** 1924 pp. 97–105 photos.

65.—Baudrimont, A. A propos de la forme des oeufs de Poule et de l' " Essai d'une théorie générale des anomalies de le membrane coquillière " per F. Lataste. Proc.-verb. Soc. Linn. Bordeaux **75** 1924 pp. 235–242.

66.—Baudrimont, A. L'oeuf chemine dans oviducte petit bout en avant. Constatation. Proc.- verb. Soc. Linn. Bordeaux **76** 1924 pp. 64–67.

67.—Baxter, E. V. and **Rintoul,** L. J. The spread and distribution of the Woodcock as a breeding bird in Scotland since the beginning of the nineteenth century. Scot. Nat. Edinburgh **1924** pp. 13–20 47–51.

Baxter, E. V. *vide* Rintoul.

68.—Beck, H. A. The Pennsylvania German names of Birds. Auk Lancaster Pa. **41** 1924 pp. 288–295.

69.—Beebe, W. Galapagos: World's end. Pp. xxi + 443 9 col. pls. and 83 photos. New York (Putnams). Published under the auspices of the New York Zoological Society 1924 8vo.

70.—Beever, G. On keeping Pheasants. Avicult. Mag. London (4) **2** 1924 p. 1–10.

71.—B[elcher], C. F. Nyasaland Notes 4. Subfamily Ploceinae. Ool. Rec. London **4** no. 4 1924 pp. 1–10.

72.—Bennett, A. G. Notas sobre el pato vapor, *Tachyeres patachonicus* (King), llamado " Canvas-back Duck " en las Falklands. Hornero Buenos Aires **3** 1924 pp. 280–282.

73.—Benoit, J. Recherches sur l'activité endocrinienne du testicule impubère chez les Gallinacés. Arch. Anat. Hist. Embr. Strasbourg **3** 1924 pp. 247–280 6 pls. 13 textfigs.

74.—Benoit, J. Sur la significance de le glande rudimentaire droite chez la Poule. C.R. Acad. Sci. Paris **178** 1924 pp. 341–344.

75.—Benoit, J. Sur l'activité endocrine du testicule impubère chez les Gallinacés. C.R. Acad. Sci. Paris **178** 1924 pp. 881–883.

76.—Benoit, J. Sur un nouveau cas d'inversion sexuelle expérimentale chez la Poule domestique. C.R. Acad. Sci. Paris **178** 1924 pp. 1640–1642.

77.—Benoit, J. Hypomasculisme expérimental chez le Coq domestique. C.R. Acad. Sci. Paris **179** 1924 pp. 606–609.

78.—Benoit, J. Action de la castration sur le plumage, chez de Coq domestique. C.R. Soc. Biol. Paris **90** 1924 pp. 450–453 fig.

79.—Benoit, J. Action des rayons X sur le testicule du Coq. C.R. Soc. Biol. Paris **90** 1924 pp. 802–805 fig.

80.—Bent, A. C. Birds observed in southeastern Texas in May, 1923. Wilson Bull. Oberlin **36** 1924 pp. 1–20.

81.—Bergtold, W. H. Colorado Anatidae. Auk Lancaster Pa. **41** 1924 pp. 72–89.

82.—Berlioz, J. Etude d'une collection d'Oiseaux de Chine. Bul. Muséum Paris **1923** pp. 486–489.

83.—Berlioz, J. Etude de la collection de Trochilidés rapportée par M. le Capitaine d'Espinay de la région de Quito (Equateur). Bul. Muséum Paris **1924** pp. 171–177.

84.—Bertoni, A. de W. Notas sobre aves del Paraguay. Hornero Buenos Aires **3** 1924 p. 279.

85.—Bianchi, V. Troisième supplément à la " Liste des oiseaux du gouv. de St.-Pétersbourg " 1907 et dates nouvelles concernant les espèces plus rare. Ann. Mus. Zool. Petrograd **21** 1916 pp. vi–xv. [In Russian.]

86.—Bianchi, V. Keys to facilitate the naming of palaearctic and himalo-chinese Thrushes (Turdinae) in their various plumages. Bul. Acad. Sci. Russ. Petrograd (6) **15** 1921 pp. 509–584. [In English.]

87.—Bickerton, W. Notes on Birds observed in Hertfordshire during 1920. Trans. Herts. Nat. Hist. Soc. St. Albans **17** 1923 pp. 333–340.

88.—Bicknell, E. P. The status of the Black Gyrfalcon as a Long Island Bird. Auk Lancaster Pa. **41** 1924 pp. 64–68.

89.—Billard, G. Les sacs aériens envisagés comme renforçateurs du sens musculaire chez l'oiseau dans le vol et plus spécialement dans le vol à voile. Ann. Sci. Nat. (Zool.) Paris (10) **7** 1924 pp. 249–307.

90.—Blaauw, F. E. Een en ander over Noord-Amerikaansche Vogels. Ardea Leiden **13** 1924 pp. 37–46.

91.—Blathwayt, F. L. Phenological report on first appearances of Birds, etct. during 1921, 1922, 1923. Proc. Dorset N. H. Field Cl. **43** 1923 pp. 108–115 also **44** 1923 pp. 105–119 **45** 1924 pp. 174–185.

92.—Blincoe, B. J. Random notes on the feeding habits of some Kentucky Birds. Wilson Bul. Oberlin **35** 1923 pp. 63–71.

93.—Boase, H. Courting display of the Fulmar. Brit. Bds. London **18** 1924 pp. 45–48.

94.—Boase, H. Courting display of the Goldeneye on salt water. Brit. Bds. London **18** 1924 pp. 69–71.

95.—Bodnár, B. Zur Klarung des Vogelzuges. Aquila Budapest **30-31** 1924 pp. 136–144. [Magyar and German.]

96.—Bond, J. A. W. The nestling Marsh-Warbler. Brit. Bds. London **17** pp. 185–186.

97.—B.O.U. Committee. Fourth Report of the Committee on the Nomenclature and Records of Occurrences of Rare Birds in the British Islands and certain necessary changes in the nomenclature of the B.O.U. List of British Birds. Ibis London **1924** pp. 152–158.

98.—Boubier, M. L'oiseau et son milieu. Pp. 1–287 Paris (Flammarion) 1922 sm. 8vo.

99.—Boubier, M. Les Oiseaux cosmopolites. Ann. Soc. Linn. Lyon **71** 1924 pp. 26–36.

100.—Boubier, M. Le chant de le Mésange Charbonnière (*Parus major major* L.) et ses caractéres avec une étude critique de l'influence présumée des conditions météorologiques sur son intensité. Bul. Soc. Zool. Genève **3** fasc. 3 pp. 5–20.

101.—Boxberger, L. von. Beobachtungen über des Brutgeschäft von *Remiza pendulina* (L.). Beitr. Fortpfl.-biol. Vög. Berlin **1** 1924 pp. 32–34.

Boyd, A. W. *vide* Wallis.

102.—Boyden, E. A. An experimental study of the development of the Avian cloaca, with special reference to a mechanical factor in the growth of the allantois. J. Exp. Zool. Philadelphia **40** 1924 pp. 437–471 23 figs.

Bradshaw, H. S. *vide* Richmond.

103.—Brambell, F. W. R. Notes and records of some of the Irish Birds in the collection of the late Henry Blake Knox. Irish Nat. Dublin **33** 1924 pp. 101–108.

104.—Brambell, F. W. R. The golgi apparatus in the Avian oocyte. Nature London **113** 1924 pp. 493–494 2 figs.

105.—Brambell, F. W. R. Sex determination in Birds. Sci. Progr. London **19** 1924 pp. 257–265 1 pl.

Brambell, F. W. R. *vide* Gatenby.

106.—Brandes, G. Beobachtungen und Reflexionen über die Atmung der Vögel. Arch. ges. Physiol. Berlin **203** 1924 pp. 492–511 4 figs.

107.—Brandt, H. W. The nesting of the Short-tailed Hawk. Auk Lancaster Pa. **41** 1924 pp. 59–64 1 pl.

108.—Breguet, L. Sur le rendement de la propulsion des oiseaux par battements de leurs ailes. C.R. Acad. Sci. Paris **178** 1924 pp. 2238–2241.

109.—Bremer, F. Recherches sur la physiologie du cervelet chez le Pigeon. C.R. Soc. Biol. Paris **90** 1924 pp. 381–384.

110.—Bremer, J. L. Mechanical factors governing the position of the cœliac artery in chick and turtle. Amer. J. Anat. Philadelphia **34** 1924 pp. 215–239 7 figs.

111.—Brewster, W. The Birds of the Lake Umbagog region of Maine. Bul. Mus. Comp. Zöol. Cambridge Mass. **66** 1924 pp. 1–209.

112.—Briggs, F. S. A sidelight on Bird migration. Nature London **114** 1924 p. 574.

113.—Bright, H. The breeding of the Pigmy Dove (*Chamaepelia minuta*). Avicult. Mag. London (4) **2** 1924 pp. 253–254.

Brindley, H. H. *vide* Havilland.

Brock, G. *vide* Duerden.

114.—Brody, S. The rate of ovulation in the Domestic Fowl during the Pullet year. J. Gen. Physiol. New York **3** 1921 pp. 431–437.

115.—Brody, S. The rate of growth of the Domestic Fowl. J. Gen. Physiol. New York **3** 1921 pp. 765–770 4 figs.

116.—Brooks, A. The affinities of some Nearctic and Palearctic Ducks. Ibis London **1924** pp. 474–477 text-fig. 7.

Brooks, A. *vide* Griscom.

117.—Brown, R. H. Some breeding habits of the Swallow and House-Martin. Brit. Bds. London **17** 1924 pp. 183–184.

118.—Brown, R. H. The nest building and other breeding habits of the Long-tailed Tit. Brit. Bds. London **17** 1924 pp. 206–207.

119.—Brown, R. H. Field-notes from Cumberland. Brit. Bds. London **17** 1924 pp. 222–228.

120.—Brown, R. H. Field notes on the Magpie, as observed in Cumberland. Brit. Bds. London **18** 1924 pp. 122–128.

121.—Bucknill, Sir J. H. The disappearance of the Pink-headed Duck (*Rhodonessa caryophyllacea* Lath.). Ibis London **1924** pp. 146–151 also pp. 593–594.

122.—Bunyard, P. F. Surrey Field-notes. Brit. Bds. London **17** pp. 198–205.

123.—Bunyard, P. F. Observations on a Cuckoo depositing its egg in a Wagtail's nest. Bul. Brit. Orn. Cl. London **45** pp. 12–14.

124.—Burg, G. von. Les oiseaux de la Suisse. Avec le concours de nombreux observateurs de tous les Cantons. Livr. XIV pp. 2699–2915. Berne et Genève (Georg) 1924. 8vo.

125.—Burkitt, J. P. A study of the Robin by means of marked Birds. Bt. Bds. London **17** 1924 pp. 294–303.

126.—Burkitt, J. P. A study of the Robin by means of marked Birds. Brit. Bds. London **18** 1924 pp. 97–103.

127.—Burleigh, T. D. Notes on the Bird-life of Allegheny County, Pennsylvania. Wilson Bul. Oberlin **35** 1923 pp. 79–99 138–147.

128.—Burleigh, T. D. Migration notes from State College, Center County, Pennsylvania. Wilson Bull. Oberlin **36** 1924 pp. 68–77 128–132.

129.—Burns, F. L. The philosophy of Birds' nests and comparative Calology in consideration of some local nidicolous Birds. Wilson Bull. Oberlin **36** 1924 pp. 78–88 121–127 188–200.

130.—Büsing, O. Eine Nachbrut des Mauerseglers (*Apus apus L.*) Orn. Monatsb. Berlin **32** 1924 pp. 31–33.

131.—Büsing, O. Steinsperlings-Bericht. Orn. Monatsb. Berlin **32** 1924 pp. 137–138.

132.—Butler, A. G. The typical Finches pp. 15–24 42–52 2 col. pls. 98–100 120–124 129–139 149–159; Larks (Alaudidae) pp. 175–186. Avicult. Mag. London (4) **2** 1924.

133.—Butterfield, W. R. Notes on the local fauna, etc. for 1923. Hastings and East Sussex Nat. **4** 1924 pp. 1–6.

134.—Campbell, A. J. and A. G. Note on the Dark Thornbill (*Geobasileus hedleyi*) with description of its nest and eggs. Emu Melbourne **23** 1924 pp. 220–221.

Card, L. E. *vide* Hamilton.

Caridroit, F. *vide* Pézard.

135.—Carlier, W. Hooding of Birds. J. Physiol. Cambridge **59** 1924 (Proc. Physiol. Soc.) pp. l-li.

136.—Carter, B. A. The Birds of Sutton Park. Proc. Birmingham Nat. Hist. Phil. Soc. **15** 1923 pp. 31–39.

137.—Carter, T. Birds of the Broome Hill district [W. Australia]. Emu Melbourne **23** 1924 pp. 223–235 306–318 photos.

138.—Cathelin, F. Le nid de l'oiseau: moeurs et théorie mecanique des instincts. Pp. 220 16 pls. Paris (Delagrave) 1924 8vo.

139.—Chaine, J. Nouvelle contribution á la présence de l'Oxylophe geai, *Coccistes glandarius* L. dans le Sud-Ouest de la France. Proc-verb. Soc. Linn. Bordeaux **75** 1924 pp. 207–208.

140.—Chaine, J. Le Guépier vulgaire *Merops apiaster* à Bordeaux. Proc.-verb. Soc. Linn. Bordeaux **76** 1924 pp. 63–64.

141.—Chance, E. P. The Cuckoo. Ool. Rec. London **4** No. 4 1924 pp. 14–18.

142.—Chapin, J. P. Size variation in *Pyrenestes*, a genus of Weaver-Finches. Bul. Amer. Mus. N. H. New York **49** 1924 pp. 415–441 11 figs.

143.—Chapin, J. P. Profiteers of the busy bee. Natural History New York **24** 1924 pp. 328–336 map and 5 figs.

144.—Chapman, F. M. Descriptions of new Flycatchers from Colombia, Ecuador and Peru. Amer. Mus. Nov. New York No. **118** 1924 pp. 1–11.

145.—Chapman, F. M. Descriptions of new genera and species of Tracheophonae from Panama, Ecuador, Peru and Bolivia. Amer. Mus. Nov. New York No. **123** 1924 pp. 1–9 2 figs.

146.—Chapman, F. M. Descriptions of new Birds from Ecuador, Colombia Peru and Bolivia. Amer. Mus. Nov. New York no. **138** 1924 pp. 1–16.

147.—Chapman, F. M. Descriptions of new Birds from Colombia, Ecuador, Peru and Bolivia. Amer. Mus. Nov. New York no. **143** 1924 pp. 1–16.

148.—Chapman, F. M. Criteria for the determination of subspecies in systematic ornithology. Auk Lancaster Pa. **41** 1924 pp. 17–29.

149.—Chapman, F. M. and **Griscom, L.** The House Wrens of the genus *Troglodytes*. Bul. Amer. Mus. N.H. **50** 1924 pp. 279–304 2 maps.

Chapman, F. M. *vide* Oberholser.

150.—Chasen, F. N. Notes on the fauna of Pulan Bulan, Rhio Archipelago. J. Malay Br. R. Asiat. Soc. Singapore **2** 1924 pp. 58–62.

151.—Chasen, F. N. Bird Notes. On the occurrence of certain alien birds in Singapore. J. Malay Br. R. Asiat. Soc. Singapore **2** 1924 pp. 68–70.

152.—Chasen, F. N. Remarks on the ornithology of the islands near Singapore. Singapore Nat. No. **3** 1924 pp. 22–36 2 maps.

153.—Chasen, F. N. and **Kloss, C. B.** The Malaysian members of the genus *Fregata*. J. Malay Br. Asiat. Soc. Singapore **2** 1924 pp. 62–65.

154.—Chasen, F. N. and **Kloss, C. B.** Some birds of Christmas Island (Indian Ocean). J. Malay. Br. R. Asiat. Soc. Singapore **2** 1924 pp. 65–68.

Cheeseman, R. E. *vide* Ticehurst.

155.—Chenery, A. Some notes on birds seen during a holiday trip in south-west Queensland. S. Austr. Orn. Adelaide **7** 1924 pp. 215–229 map.

156.—Chisholm, A. H. Seeking rare Parrots. Emu Melbourne **24** 1924 pp. 25–32 1 col. pl. [opposite p. 81].

157.—Chisholm, E. C. The avifauna around Tumbarumba, N.S.W. Emu Melbourne **24** 1924 pp. 102–106.

158.—Christoleit, E. Von der Bartmeise (*Panurus biarmicus*) in Ostpreussen, Journ. Orn. Berlin **72** 1924 pp. 10–16.

159.—Christoleit, F. Der Vogelgesang kein wesentlicher Bestandteil des Fortpflanzungsgeschäfts ? Journ. Ornith. Berlin **72** 1924 pp. 108–113.

160.—Clara, M. Das Pancreas der Vögel. Vorlauf. Mitt. Anat. Anz. Jena **57** 1924 pp. 257–265 1 fig.

161.—Clarke, G. v. H. Some notes on Birds found breeding in the neighbourhood of Aleppo in 1919. Ibis London **1924** pp. 101–110.

162.—Clarke, W. E. The Lesser Snow-Goose in the Outer Hebrides. Scot. Nat. Edinburgh **1924** p. 9.

163.—Cleare, L. D. The Old Witch or Jumby-Bird *Crotophaga ani* Linn. J.B. Agric. Brit. Guiana **17** 1924 pp. 23–25 fig.

164.—Cleland, J. B. The Birds of the Encounter Bay district. S. Austr. Orn. Adelaide **7** 1924 pp. 172–184.

165.—Clodius, G. Ornithologischer Bericht über Mecklenburg für die Jahre 1914–1920. Arch. Ver. Natg. Güstrow **74** 1921 pp. 24–46.

166.—Clodius, G. Ein für Mecklenburg und Deutschland neuer Vögel. Arch. Ver. Natg. Güstrow **75** 1922 p. 225.

167.—Collinge, W. E. The food of some British Wild Birds. A study of economic ornithology. 2nd rev. ed. Pts. 1/2, 3. Pp. 1–64 65–96 2 pls. 8 diagr. York (Publ. by author) 1924 8vo.

168.—Comte, A. Notes et observations biologiques sur les oiseaux des environs de Genève. Bul. soc. zool. Genève **3** fasc. 3 1924 pp. 35–41.

169.—Congreve, W. M. An Oologist in Spitsbergen. Comp. Ool. Santa Barbara Cal. **1** 1924 pp. 13–25 4 photos.

170.—Congreve, W. M. A collecting trip in Hungary 1924. Ool. Rec. London **4** No. 3 1924 pp. 1–16.

171.—Conover, H. B. A new subspecies of *Nothoproeta* from Chile. Auk Lancaster Pa **41** 1924 pp. 334–336.

172.—Contreras, M. de. Faune de Belgique. Les grives de passage accidental en notre pays. Gerfaut Bruxelles **14** 1924 pp. 81–85.

173.—Corti, V. A. Quelques idées sur l'introduction d'un système international de notation ornithologique. Rev. Fr. d'Orn. Paris **16** 1924 pp. 428–433.

174.—Cotte, J. Injection de sérum antiovaire a un Coq gynandromorphe ; modifications raciales consecutives. C.R. Soc. Biol. Paris **91** 1924 pp. 1252–1254.

175.—Coupin, F. Les formations choroïdiennes des Ratites. Bul. Muséum Paris **1924** pp. 37–40 4 figs.

176.—Coward, T. A. Black Redstart nesting in south England. Brit. Bds. London **18** 1924 pp. 76–77.

177.—Coward, T. A. Report on Vertebrates for 1922–1923. Lancs. Ches. Nat. Darwen **16** 1924 pp. 181–184.

Coward, T. A. *vide* Turner.

178.—Crew, F. A. E. A Black Leghorn which turned White. J. Heredity Washington **13** 1922 pp. 299–303 8 figs.

179.—Crörgey, T. Ungelöste Probleme in der Ornithologie. Aquila Budapest **30-31** 1924 pp. 11–25. [Magyar and German.]

180.—Dabbene, R. Los Petrelles y los Albatros del Atlantico austral. Hornero Buenos Aires **3** 1924 pp. 227–238 4 figs. 1 map.

181.—Dabbene, R. Notas sobre el Petrel Plateado, *Priocella antarctica* (Stephens). Rev. Chilena Santiago **25** 1923 pp. 193–202 1 pl.

182.—Daguerre, J. B. Apuntes sobre algunas aves de la provincia de Buenos Aires. Hornero Buenos Aires **3** 1924 pp. 248–252.

183.—Daguerre, J. B. Observaciones sobre la nidificacion de los Tordos, *Molothrus brevirostris* y *M. badius*. Hornero Buenos Aires **3** 1924 p. 285.

184.—Dale, E. M. S. Notes on Crossbills. Canad. Field-Nat. Ottawa **38** 1924 pp. 119–120.

185.—Dantschakoff, W. Wachstum transplantierter embryonaler Gewebe in der Allantois. Zs. ges. Anat. München Abt. 1. **74** 1924 pp. 401–431 13 figs.

186.—Danchakoff, V. and **Agassiz,** A. Growth and development of the neural plate in the allantois. J. Comp. Neur. Philadelphia **37** 1924 pp. 397–437 27 figs.

187.—Das, B. K. On the intra-renal course of the so-called "renal portal" vein in some common Indian Birds. Proc. Zool. Soc. London **1924** pp. 757–773 10 textfigs.

Daumerie, A. *vide* Havre.

188.—Dawson, W. L. The Birds of California. A complete scientific and popular account of the 580 species and subspecies of Birds found in the State. 4 vols. many illustr. San Diego etc. (S. Moulton Coy.) 1924 4to.

189.—Dawson, W. O. A brief account of a sojurn in Albemarle Island (Galapagos). Comp. Ool. Santa Barbara Cal. **1** 1924 pp. 29–32.

Dearborn, N. *vide* Weed.

Dearstyne, R. S. *vide* Kaupp.

190.—Defretin, R. Origine et migration des gonocytes chez le Poulet. C.R. Soc. Biol. Paris **91** 1924 pp. 1082–1084.

191.—Delacour, J. Honey-Eaters Sunbirds and Flower-Peckers (in aviculture). Avicult. Mag. (4) **2** 1924 pp. 307–316 col. pl.

192.—Delacour, J. and **Jabouille, P.** New races of *Tropicoperdix*, *Hierophasis*, *Polyplectrum*, *Sphenocercus*, *Micropternus*, *Cyornis*, *Garrulax*, *Criniger*, *Mixornis*, *Cissa*, *Æthopyga*. Bul. Bt. Orn. Cl. London **45** 1924 pp. 28–35.

193.—De Lury, R. E. Some experiences in Bird-banding. Canad. Field-Nat. Ottawa **38** 1924 p. 21–24 **4** figs.

194.—Denburgh, J. V. The Birds of Todos Santos Islands. Condor Berkeley Cal. **26** 1924 pp. 67–71.

195.—Derscheid, J. M. Note sur la disposition des tendons du propatagium chez le Calao, *Bucorvus abyssinicus* Gm. Bul. Muséum Paris **1924** pp. 41–43 **3** figs.

196.—Desogus, V. La pineale negli uccelli normali e cerebrolesionati. (Ricerche specimentali). Riv. Biol. Roma **6** 1924 pp. 495–504.

197.—Despott, G. Passo straordinario del Tordo Sassello (*Turdus iliacus* L.) a Malta (1922–1923). Riv. Ital. Orn. **7** 1923 pp. 20–21.

198.—Dewar, D. The Common Birds of India. Illustrated by G. A. Levett-Yeats. Vol. ii. Non-Sporting Birds, Non-Passerine and Land Birds. Pp. viii + 138 many illustrs. Calcutta (Thacker Spink) 1924.

199.—Dewar, J. M. The Bird as a diver. A contribution to the natural history of Diving Birds. Pp. xii + 173 London (Witherby) 1924. 8vo.

200.—Dickey, D. R. and **Rossem, A. J. van.** A new race of the Least Bittern from the Pacific Coast. Bul. S. Cal. Acad. Sci. Los Angeles **23** 1924 pp. 11–12.

201.—Dickey, D. R. and **Rossem, A. J. van.** The status of the Florida Gallinule of western North America. Condor Berkeley Cal. **26** 1924 p. 93.

202.—Dinelli, L. Notas biológicas sobre aves del noroeste de la Argentina. Hornero Buenos Aires **3** 1924 pp. 253–258.

203.—Dixon, J. Nesting of the Wood Duck in California. Condor Berkeley Cal. **26** 1924 pp. 41–66 26 photos.

204.—Dobay, L. v. Einiges über den Kuckuck. Verh. Mitt. siebenb. Ver. Naturw. Hermannstadt **72-74** 1924 pp. 147–165.

205.—Dobay, L. V. Der Zippammer (*Emberiza cia* L.) in Siebenbürgen Brutvogel. Verh. Mitt. siebenb. Ver. Naturw. Hermannstadt **72-74** 1924 pp. 166–169.

206.—Dobbrick, L. Beobachtungen an einem Mischsänger von *Certhia familiaris* × *brachydactyla*. Orn. Monatsb. Berlin **32** 1924 pp. 4–6.

207.—Dobbrick, L. Am Gaudensee bei Finckenstein (Westpreussen). Orn. Monatsb. Berlin **32** 1924 pp. 64–65.

208.—Dobbrick, L. Verschiebungen im Bestande der Brutpaare von *Larus minutus* Pall. auf dem Drausensee bei Elbing. Orn Monatsb. Berlin **32** 1924 pp. 66–68.

209.—Donatien, A. and others. Le typhose aviaire en Algérie. Rev. gén. méd. vétérin. Toulouse **33** 1924 pp. 65–83.

210.—Dorno, C. Reizphysiologische Studien über den Gesang der Vögel im Hochgebirge. Arch. ges. Physiol. Berlin **204** 1924 pp. 645–659 1 fig.

211.—Dubois, A. D. A nuptial song-flight of the Short-eared Owl. Auk Lancaster Pa **41** 1924 pp. 260–263.

212-3.—Duerden, J. E. and **Brock, G.** The lining of the gizzard of the Ostrich. S. Afr. J. Sci. Johannesburg **21** 1924 pp. 378–383. 3 pls.

214.—Duncker, H. Vererbungsversuche an Kanarienvögeln iii. Haubenfaktor, Weissfaktor, Scheckproblem. Journ. Ornith. Berlin **72** 1924 pp. 314–381 48 figs.

215.—Dunlop, E. B. Lakeland Ornithology. Trans. Carlisle N. H. Soc. **3** 1923 pp. 1–39.

Dunn, L. C. *vide* Schneider.

216.—Dupond, C. Quelques nouvelles concernant les Héronnières de le Belgique. Gerfaut Bruxelles **14** 1924 pp. 16–19.

217.—**Dupond,** C. Une mise au point de le question de la grive petite, *Turdus minor* Gm. en Belgique. Gerfaut Bruxelles **14** 1924 pp. 57–72.

218.—**Dwight,** J. and **Griscom,** L. Descriptions of new Birds from Costa Rica. Amer. Mus. Nov. New York No. **142** 1924 pp. 1–5.

219.—**Earle,** W. R. A simple apparatus and method for the injection of early chick embryos. J. Elisha Mitchell Sci. Soc. Chapel Hill N.C. **40** 1924 pp. 171–175 1 pl. 1 textfig.

220.—**Eaton,** W. F. Decrease of the English Sparrow in eastern Massachusetts. Auk Lancaster Pa **41** 1924 pp. 604–606 chart.

221.—**Ebert,** B. und **Schulgina,** O. Ueber Paratyphus und Typhus bei Vögel. Centralbl. Bakt. Jena **1** Abt. **91** 1924 pp. 496–508.

222.—**Eckardt,** W. R. Die Mauersegler 1923. Orn. Monatsb. Berlin **32** 1924 pp. 82–83 also L. **Schuster** pp. 83–84, H. **Reinhardt** p. 84.

223.—**Edington,** J. W. The bacteriological study of Fowl typhoid and allied infections with special reference to three epidemics. J. Path. Bact. Edinburgh **27** 1924 pp. 427–437.

224.—**Edwards,** H. V. Wild Ducks of south-eastern New South Wales. Emu Melbourne **24** 1924 pp. 145–146.

Edwards, H. V. *vide* Gogerley.

225.—**Eifrig,** G. Is photoperiodism a factor in the migration of Birds. Auk Lancaster Pa. **41** 1924 pp. 439–444; also A. L. **Thomson** pp. 639–641.

226.—**Engholm,** V. A. Om doppingarna i Tåkern [on the Grebes of Takern Lake]. Fauna och Flora Stockholm **1924** pp. 36–38.

227.—**Erhard,** H. Der Ruf der Alpendohle. (*Pyrrhocorax graculus* L.) Anz. Orn. Ges. Bay. München No. **8** 1924 pp. 67–68.

228.—**Erhard,** H. Messende Untersuchungen über den Farbensinn der Vögel. Zugleich ein Beitrag zur Lehre von den Schmuckfarben. Zool. Jahrb. Jena Abt. Allg. Zool. **41** 1924 pp. 489–552.

229.—**Estanove,** J. Contribution à l'étude de la nidification du Martin Roselin [*Pastor roseus*] en Macedoine Serbe. Rev. Fr. d'Orn. Paris **16** 1924 pp. 369–370.

230.—**Eykman,** C. *Mareca americana* (Stephens). Een nieuwe eendensoort voor de Nederlandsche Avifauna. Jaarb. Club Nederl. Vogelk. Zevenbergen **13** 1923 pp. 5–7 photos.

231.—**Eykman,** C. Wederom een Baikaltaling in Nederland. *Anas formosa* Georgi. Jaarb. Club Ned. Vogelk. Zevenbergen **14** 1924 pp. 55–56.

232.—**Ezra,** A. The gregarious nesting of the Superb Glossy Starling (*Spreo superbus*). Avicult. Mag. London (4) **2** 1924 pp. 168–170.

233.—**Ezra,** A. Elevage du Spréo tricolore. Oiseau Paris **5** 1924 pp. 279–281.

234.—**Falla,** R. A. Discovery of a breeding place of Buller's Shearwater, Poor Knight's Island, N.Z. Emu Melbourne **24** 1924 pp. 37–43 3 photos.

235.—**Farley,** F. L. Large numbers of Mallards remain at Buffalo Lake, Alberta, throughout winter. Canad. Field-Nat. Ottawa **38** 1924 p. 119.

236.—**Faxén,** L. Stormfågelns [*Fulmarus glacialis*] spridningshistoria. Fauna och Flora Stockholm **1924** pp. 259–276 2 maps.

237.—**Fazzari,** J. Differenze nella morphologia e nelle connessioni degli elementi mesenchimali di organi diversi di uno stesso embrione nelle culture di tessuti in "vitro." Arch. Ital. Anat. Embr. Firenze **21** 1924 pp. 452–463 1 pl.

238.—**Fell,** H. G. Histological studies on the gonads of the Fowl. II.—The histogenesis of the so-called "luteal" cells of the ovary. Brit. J. Exper. Biol. Edinburgh **1** 1924 p. 293–312 1 pl.

239.—**Fenk,** R. Wieder ein beiartig singender Baumläufer. Orn. Monatsb. Berlin **32** 1924 pp. 13–14.

240.—**Fenton,** C. L. The Birds of Floyd County, Iowa. Amer. Midl. Nat. Notre Dame Ind. **9** 1924 pp. 65–79 2 maps.

241.—**Ferrouillat,** A. et P. La migration des oiseau. Rev. Fr. d'Orn. Paris **16** 1924 pp. 273–278.

242.—**Finley,** W. L. and I. Changing habits of the Vaux Swift and Western Martin. Condor Berkeley Cal. **26** 1924 pp. 6–9 4 photos.

243.—**Finn,** F. Wildfowl of the World. Pp. 1–183 many illustr. London (Hutchinson) 1924. 8vo.

244.—**Fischer,** H. und **Hilger,** J. Zur Kenntnis der natürlichen Porphyrine. 8. Mitt. Ueber des Vorkommen von Uroporphyrin (als Kupfersalz, Turacin) in das Turakusvögeln und den Nachweis von Koproporphyrin in der Hefe. Hoppe-Seylers Zs. physiol. Chem. Berlin **138** 1924 pp. 49–67 1 pl.

245.—**Fischer,** H. und **Kögl,** F. Ueber Ooporphyrin aus Kiebitzeierschalen und seine Beziehungen zum Blutfarbstaff. Hoppe-Seylers Zs. physiol. Chem. Berlin **138** 1924 pp. 262–275.

246.—**Fleischmann,** A. Der Rumphang (Splanchnon) der Wirbeltiere. Untersuchungen zur vergleichenden Systematik der Eingeweide. Zs. Morph. Ökol. Berlin **2** 1924 pp. 505–566 47 figs.

247.—**Fleming,** J. H. A new antarctic form of *Larus dominicanus* Lichtenstein. Proc. Biol. Soc. Washington **37** 1924 p. 139.

248.—**Fletcher,** J. A. Does Tasmania possess a second species of Blue Wren (*Malurus*)? Emu Melbourne **23** 1924 pp. 206–208.

249.—**Fletcher,** J. A. Birds of the Steppes [Tasmania]. Emu Melbourne **24** 1924 pp. 107–117 2 photos.

Fletcher, L. B. *vide* Whittle.

250.—**Fletcher,** T. B. and **Inglis,** C. M. Some Common Indian Birds, Nos. 25–30. Agric. J. India Calcutta **19** 1924 pp. 1–3 111–116 225–231 351–355 455–459 557–562 6 col. pls. and many text figs.

251.—**Forsslund,** K. H. Det högre djurlivet inom Suorvaområdet. Ett tillägg. Fauna och Flora Stockholm **1924** pp. 53–65.

252.—**Fox,** R. H. New records [in the I. of W.]. Proc. I. of Wight N. H. Soc. **1** 1924 p. 176.

253.—**Fuchs,** F. Zur Entwicklung des Kiebitzherzens. Zs. ges. Anat. München Abt. 1 **75** 1924 pp. 1–35 26 figs.

254.—**Gabrielson,** I. N. Notes on the Birds of Wallowa County, Oregon. Auk Lancaster Pa. **41** 1924 pp. 552–565.

255.—**Gabrielson,** I. N. Food habits of some winter bird visitants. Bul. U. S. Dept. Agr. Washington no. **1249** 1924 pp. 1–32 5 pls.

256.—**Gabrielson,** I. N. and **Jewett,** S. G. Notes on the Birds of western North Dakota. Auk Lancaster Pa. **41** 1924 pp. 296–303.

257.—**Galasse,** A. Compte rendu de recherches nidologiques faites dans la region de Bouillon (Luxembourg). Gerfaut Bruxelles **14** 1924 pp. 9–16.

258.—**Ganier,** A. F. Notes from the Tennessee Cumberlands. Wilson Bul. Oberlin **35** 1923 pp. 26–34.

259.—**Ganier,** A. F. Nesting of the Sharp-shinned Hawk. Wilson Bul. Oberlin **35** 1923 pp. 41–43.

260.—**Gaschott,** O. Die Vogelwelt der Umgebung Speyers a. Rh. Verh. Orn. Ges. Bayern München **16** 1924 pp. 32–39.

261.—**Gatenby,** J. B. The transition of peritoneal epithelial cells into germ cells in *Gallus bankiva*. Q. J. Microsc. Sci. London **68** 1924 pp. 1–16 1 pl. 1 textfig.

262.—**Gatenby,** J. B. and **Brambell,** F. W. R. Notes on the genetalia of a crowing hen. J. Genetics Cambridge **14** 1924 pp. 173–183 4 figs.

263.—**Gaukrodger,** D. W. The way of an Eagle [*Uroaetus audax*]. Emu Melbourne **24** 1924 pp. 3–12 5 photos.

264.—**Gawrilenko,** A. Die anomale Entwicklung des Zentralnervensystem bei einen Huhnerembryo. Anat. Anz. Jena **59** 1924 pp. 12–31 17 figs.

265.—**Gelderen,** C. van. Zur Entwicklungsgeschichte der Sinus durae matris beim Huhn (*Gallus domesticus*). Anat. Anz. Jena **58** 1924 pp. 431–440 4 figs. pp. 472–480 1 fig.

266.—**Gelderen, C. van.** Die Morphologie der Sinus durae matris, 2te T. Die vergleichende Ontogenie der neuroknaniellen Venen der Vögel und Säugetiere. Zs. ges. Anat. München Abt. 1 **74** 1924 pp. 432–508 36 figs.

267.—**Gengler, J.** Viktor von Tschusi zum Gedächtnis. Journ. Ornith. Berlin **72** 1924 pp. 450–460 portr.

268.—**Gengler, J.** Girlitzstudien. Verh. Orn. Ges. Bayern München **16** 1924 pp. 76–84.

269.—**Gengler, J.** Viktor von Tschusi zum Gedächtnis. Verh. Orn. Ges. Bayern München **16** 1924 pp. 86–90.

270.—**Gengler, J.** Buchfinken-Studien. Verh. Orn. Ges. Bayern München **16** 1924 pp. 103–128 map.

271.—**Gengler, J.** Graumeisen-Beobachtungen. Verh. Orn. Ges. Bayern München **16** 1924 pp. 158–166.

Gerassimov-Moratschinsky, A. *vide* Koshantschikov.

272.—**Geyr von Schweppenburg, H. Freih.** SO-NW-Zugstrasse durch die Sahara. Journ. Ornith. Berlin **72** 1924 pp. 102–108.

273.—**Geyr von Schweppenburg, H. Freih.** Zur Sexualethologie der Stockente. Journ. Ornith. Berlin **72** 1924 pp. 472–476.

274.—**Geyr von Schweppenburg, H. Freih.** Die Rufe von *Asio otus*. Orn. Monatsb. Berlin **32** 1924 pp. 33–34.

275.—**Geyr von Schweppenburg, H. Freih.** Seltene Wintergaste in Rheinland. Orn. Monatsb. Berlin **32** 1924 pp. 78–79.

276.—**Geyr von Schweppenburg, H. Freih.** Schwarzspecht-Hohltaube. Orn. Monatsb. Berlin **32** 1924 pp. 126–128.

277.—**Geyr v. Schweppenburg, H. Freih.** Anmerkungen zur Subspeciesfrage. Unter besonderer Berücksichtigung der Ornithologie. Zool. Jahrb. Jena Abt. Syst. **49** 1924 pp. 131–196.

278.—**Ghigi, A.** Sulla eredità dell' ernia cerebrale dei polli in correlazione ad altri caratteri. Arch. Zool. Napoli **8** 1916 pp. 49–88 3 pls. 5 textfigs.

279.—**Ghigi, A.** Vertebrati di Cirenaica raccolti dal Prof. Alessandro Ghigi nella escursione organizata dal Touring Club Italiano, 15–24 Aprile 1920. Mem. Acc. sc. Bologna (7) **7** 1920 pp. 67–82.

280.—**Ghigi, A.** Nouvelle apparition de *Hierophasis dissimilis*. Oiseaux Paris **5** 1924 pp. 41–43 pl. iii.

281.—**Ghigi, A.** Gonomonarrenia O fecondità nei soli maschi ibridi. Rend. Acc. sc. Bologna **27** 1923 pp. 147–149.

282.—**Ghigi, A.** Sull' organo copulatore di alcuni Palmipedi. Rend. Acc. sc. Bologna **27** 1923 pp. 150–153 2 figs.

283.—**Ghigi, A.** Osservazioni sull' eredità nel pollame compiute nell' anno 1922. Riv. Biol. Roma **5** 1923 pp. 9–15.

284.—**Giacomini, E.** Primi resultato della sommistrazione di tiroide sperimentata nei polli. Rend. Acc. sc. Bologna **27** 1923 pp. 28–36 52–61 182–188.

285.—**Gibert, A.** Sur un nid de Heron Pourpré en Camargue. Rev. Fr. Orn. Paris **16** 1924 pp. 256–259 3 photos.

286.—**Giblin, W. W.** Notes on a visit to the Greater Actaeon Island, South Tasmania. Emu Melbourne **24** 1924 pp. 131–133.

287.—**Gill, E. H. N.** A description of the nests and eggs of the common birds occurring in the plains of the United Provinces. J. Bombay N. H. Soc. **29** 1924 2 photos.

288.—**Gillespie, J. A.** Some nestings of the Crested Flycatcher [*Myiarchus crinitus*]. Auk Lancaster Pa. **41** 1924 pp. 41–44 1 pl.

289.—**Gillespie, T. H.** The King Penguin. Scot. Nat. Edinburgh **1924** pp. 31–40 63–64.

Girard, *vide* Mouquet.

290.—**Gladstone, H. S.** The distribution of the Black Grouse in Great Britain. Brit. Bds. London **18** 1924 pp. 66–68.

291.—**Gladstone, H. S.** The value of Birds. Trans. Dumfries Nat. Hist. Soc. (3) **8** 1923 pp. 10–39.

292.—Glegg, W. E. A note on the nesting of the Red-crested Pochard in the Camargue. Brit. Bds. London **18** 1924 pp. 90–96 3 photos.

293.—Glegg, W. E. On the nesting of the Flamingo in the Camargue. Brit. Bds. London **18** 1924 pp. 146–154 4 photos.

294.—Glegg, W. E. The Birds of the Blackwater valley in 1922 and 1923. Essex Naturalist Stratford **20** 1924 pp. 259–267.

295.—Glegg, W. E. A list of the Birds of Macedonia. Ibis London **1924** pp. 46–86.

296.—Gogerley, J. F. H. The Ground Parrot (*Pezoporus vallicus*) in eastern New South Wales. Emu Melbourne **24** 1924 pp. 32–35 1 photo with addt. notes by H. V. **Edwards** pp. 35–37.

297.—Goodale, H. D. Intertubular tissue in the testes of certain birds. Amer. Nat. New York **58** 1924 pp. 92–93.

298.—Goodale, H. D. and **Nonidez,** J. F. Luteal cells and hen-feathering. Amer. Nat. New York **58** 1924 pp. 91–92.

299.—Gormley, A. L. First Ontario record for *Fulmarus glacialis*. Auk Lancaster Pa. **41** 1924 pp. 470–471.

300.—Görnitz, K. und **Rensch,** B. Ueber die violette Färbung der Vogelfedern. Journ. Ornith. Berlin **72** 1924 pp. 113–118.

301.—Grant, C. H. B. *Francolinus streptophorus* in Tanganyika Territory. Bul. Bt. Orn. Cl. London **44** 1924 pp. 99–100.

302.—Greschik, E. Magen- und Gewölluntersuchungen. Beiträge zur Kleinsäuger-Fauna Ungarns. Aquila Budapest **30-31** 1924 pp. 243–263.

303.—Grinnell, J. The subspecific status of the Hermit Thrushes breeding in the Humboldt Bay district. Condor Berkeley Cal. **26** 1924 pp. 73–74.

304.—Grinnell, J. Bibliography of California Ornithology. Second Instalment to end of 1923. Pacific Coast Avifauna of the Cooper Ornithological Club Berkeley no. **16** 1924 pp. 1–191.

305.—Grinnell, J. and **Storer,** T. I. Animal life in the Yosemite. An account of the Mammals, Birds, Reptiles and Amphibians in a cross-section of the Sierra Nevada. Pp. xviii + 752 12 col. 48 half-tone pls. 65 textfigs. 2 maps. Berkeley Cal. (Univ. Cal. Press) 1924 l. 8vo [Birds pp. 247–622].

306.—Griscom, L. Descriptions of new Birds from Panama and Costa Rica. Amer. Mus. Nov. New York No. **141** 1924 pp. 1–12.

307.—Griscom, L. A review of the West Indian Black Swifts. Auk Lancaster Pa. **41** 1924 pp. 68–71 see also A. **Brooks** and H. S. **Swarth** pp. 383–384.

Griscom, L. *vide* Chapman.

Griscom, L. *vide* Dwight.

308.—Groebbels, F. Untersuchungen über den Thalamus und das Mittelhirn der Vögel. Anat. Anz. Jena **57** 1924 pp. 385–415 10 figs.

309.—Groebbels, F. Die Lage- und Bewegungsreflexe der Vögel. Zs. Biol. München 76 1922 pp. 83–120 127–136.

310.—Gromier. Sur la migration des oiseaux européens en Afrique. Rev. Fr. d'Orn. Paris **16** 1924 pp. 460–463.

311.—Grote, H. Ueber die afrikanischen grauschwänzigen Fruchttauben (Formenkreis *Treron calva*). Journ. Orn. Berlin **72** 1924 pp. 100–102.

312.—Grote, H. Beitrag zur Kenntnis der Vogelfauna des Graslandes von Neukamerun. Journ. Ornith. Berlin **72** 1924 pp. 479–517 map.

313.—Grote, H. *Anthreptes longuemarei savannarum* n. subsp. Orn. Monatsb. Berlin **32** 1924 p. 13.

314.—Grote, H. *Xenocichla flavicollis simplicicolor* n. subsp. Ornith. Monatsb. Berlin **32** 1924 p. 45.

315.—Grote, H. Neue Formen aus Westafrika. Orn. Monatsb. Berlin **32** 1924 pp. 68–72 [*Remiz, Lanius, Andropadus, Cinnyris, Hirundo.*]

316.—Grote, H. Weiteres über *Treron calva* und Verwandte. Orn. Monatsb. Berlin **32** 1924 pp. 104–105.

317.—Grote, H. Zur Verbreitung von *Cossypha heuglini* Hartl. Orn. Monatsb. Berlin **32** 1924 pp. 142–143.

318.—Gude, H. Uber *Aquila fulvescens* Gray. Falco Halle **20** 1924 pp. 9–13.

319.—Guérin, C. Transport des petits par la Guifette Epouvantail [*Hydrochelidon nigra*]. Rev. Fr. d'Orn. Paris **16** 1924 pp. 464–465.

320.—Gyldenstolpe, Count N. Description of a new Fruit Pigeon. Bul. Bt. Orn. Cl. London **44** 1924 pp. 36–37.

321.—Gyldenstolpe, N. Zoological results of the Swedish expedition to Central Africa, 1921. Vertebrata. 1.—Birds. K. Svenska Vet.-Ak. Handl. Stockholm (3) **1** No. 3 pp. 1–326 1 map 2 pls. 16 textfigs.

322.—Hachisuka, M. A new subspecies of *Alaemon*. Bul. Bt. Orn. Cl. London **44** 1924 pp. 86–87.

323.—Hachisuka, M. Remarks on *Pseudotadorna cristata*. Bul. Bt. Orn. Cl. **45** 1924 pp. 46–48.

324.—Hachisuka, M. V. Notes on some Birds from Egypt. Ibis London **1924** pp. 771–773.

325.—Hachisuka, M. The identification of the Chinese Phoenix. Tori Tokyo **4** Nos. 16-17 1924 pp. 110–120 1 pl. 2 textfigs. [in Japanese]; also in J. R. Asiatic Soc. London 1924 pp. 585–589 1 pl.

326.—Hachisuka, M. *Branta bernicla bernicla* does not occur in Japan. Tori Tokyo **4** No. 18 1924 pp. 185–189 1 textfig. [Japanese.]

327.—Haecker, V. Reizphysiologisches über den Abendgesang der Vögel. Arch. ges Physiol. Berlin **204** pp. 718–725.

328.—Haecker, Ueber Föhn und Vogelzug. Biol. Zentralbl. Leipzig **44** 1924 pp. 337–343.

329.—Hagen, W. Der Mauersegler, *Apus apus* (L.), im Sommer 1923 bei Lübeck. Journ. Ornith. Berlin **72** 1924 pp. 410–415.

330.—Hagen, W. Bienenfresser, *Merops apiaster* L., und Falkenbussard, *Buteo vulpinus intermedius* Menzb. in Schleswig-Holstein. Orn. Monatsb. Berlin **32** 1924 pp. 162–164.

331.—Hagen, W. *Otus s. scops* (L.) bei Lubeck. Orn. Monatsb. Berlin **32** 1924 pp. 164–165.

332.—Hall, R. Relationships of Tasmanian Birds. Emu Melbourne **23** 1924 pp. 183–194 285–293 maps.

333.—Hallinan. T, Notes on some Panama Canal Zone Birds with special reference to their food. Auk Lancaster Pa. **41** 1924 pp. 304–326.

334.—Hamilton, T. S. and **Card,** L. E. The utilisation of lactose by the Chicken. J. Agric. Res. Washington **27** 1924 pp. 597–604.

335.—Hamilton, T. S. and **Mitchell,** H. H. The occurrence of lactose in the alimentary canal of the Chicken. J. Agric. Res. Washington **27** 1924 pp. 605–608.

336.—Hance, R. T. The somatic chromosomes of the Chick and their possible sex relations. Science New York **59** 1924 pp. 424–425 3 figs.

337.—Hankin, E. H. Soaring flight. Trans. Norfolk Nat. Soc. Norwich **11** 1924 pp. 508–528 1 pl.

338.—Hankin, E. H. and **North,** J. D. On the angle of incidence in soaring flight. Proc. Cambridge Phil. Soc. **22** 1924 pp. 186–188.

339.—Hanna, W. C. Weights of about three thousand eggs. Condor Berkeley Cal. **26** 1924 pp. 146–153.

340.—Hardcastle, H. The mechanics of natural flight. N. Zealand J. Sci. Tech. Wellington **7** 1924 pp. 44–49.

341.—Harrison, J. H. On an "hairy albescent" variety of a Jay. Bul. Bt. Orn. Cl. London **44** p. 98.

342.—Hartert, E. Ueber die Steinwälle an den Nestern mehrere Wüstenvögel. Beitr. Fortpfl.-biol. Vög. Berlin **1** 1924 pp. 2–3, 21–22.

343.—Hartert, E. New species of *Neomixis* and *Ammomanes* described. Bul. Bt. Orn. Cl. London **45** pp. 35–36.

344.—Hartert, E. A new form of *Rhyticeros*. Bul. Bt. Orn. Cl. London **45** 1924 p. 46.

345.—Hartert, E. L'ornithologie au Maroc et ses formes tropicales. Bul. Soc. Sci. Maroc Rabat **4** 1924 pp. 59–60.

346.—Hartert, E. Graf Tommaso Salvadori†. Journ. Ornith. Berlin **72** pp. 125–127.

347.—Hartert, E. Ornithological results of Captain Buchanan's second Sahara expedition. Nov. Zool. Tring **31** 1924 pp. 1–48.

348.—Hartert, E. Notes on some Birds from Buru. Nov. Zool. Tring **31** 1924 pp. 104–111.

349.—Hartert, E. Types of Birds in the Tring Museum. B Types in the General Collection IV. Nov. Zool. Tring **31** 1924 pp. 112–134.

350.—Hartert, E. The Birds of New Hanover. Nov. Zool. Tring **31** 1924 pp. 194–213.

351.—Hartert, E. The Birds of St. Matthias Island (nr. New Hanover). Nov. Zool. Tring **31** 1924 pp. 261–275.

352.—Hartert, E. The Birds of Squally or Storm Island [nr. New Hanover]. Nov. Zool. Tring **31** 1924 pp. 276–278.

353.—Hartert, E. Ueber einige neue Vögel aus dem indo-australischen Archipel und deren Verwande. Treubia Batavia **6** 1924 pp. 20–25.

Hartert, E. *vide* Lönnberg.

Hartert, E. *vide* Rothschild.

354.—Harvey, G. H. Field-notes from West Cornwall. Brit. Bds. London **18** 1924 pp. 164–169.

Hasunuma, K. *vide* Takasukasa.

355.—Hausman, L. A. Bird migration and plumage succession charts. Amer. Nat. New York **58** pp. 87–91 fig.

356.—Havilland, M. D. (Mrs. H. H. Brindley). Notes on the Hoatzin in British Guiana. Ibis London **1924** pp. 477–480 2 pls.

357.—Havre, G. van. Note sur une capture en Belgique d'*Emberiza icterica* Eversmann. Gerfaut Bruxelles **14** 1924 pp. 1–9 photo.

358.—Havre, G. van. Observations ornithologiques faites du 1er Mai 1923 au 30 Avril 1924 et recueillies A Wyneghem. Gerfaut Bruxelles **14** 1924 pp. 41–56; also A. **Daumerie** p. 86.

359.—Hayek, H. Ueber das Schicksal des Proatlas und über die Entwicklung der Kopfgelenke bei Reptilien und Vögeln. Morph. Jahrb. Leipzig **53** 1924 pp. 137–163 2 pls.

360.—Heim de Balsac, H. Contributions à l'Ornithologie dans le Sahara septrional en Algérie et en Tunisie avec notes sur la flore et la faune des régions parcourues. Pp. 1–116 Paris 1924 8vo.

Heim de Balsac, *see also* Balsac, H. de.

361.—Heinroth, O. und M. Die Vögel Mitteleuropas. Pt. 1 pp. 1–16 8 pls. Berlin-Lichterfelder (Bernmühler) 1924 4to.

362.—Heinroth, O. Die Jugendentwicklung von *Cariama cristata*. Journ. Ornith. Berlin **72** 1924 pp. 119–124 2 pls.

363.—Heinroth, O. Lautäufserungen der Vögel. Journ. Orn. Berlin **72** 1924 pp. 223–244.

364.—Heinroth, O. Die Begattung des Emus, *Dromaeus novae-hollandiae*. Orn. Monatsb. Berlin **32** 1924 pp. 29–30.

365.—Hellmayr, C. E. Beiträge zur Ornithologie von Venezuela. Arch. Natg. Berlin **90** Abt. A. Hft. 2 1924 pp. 132–204.

366.—Hellmayr, C. E. New Birds from Chile. Field Mus. Publ. Zool. Chicago **12** 1924 pp. 71–75.

367.—Hellmayr, C. E. Catalogue of Birds of the Americas. Part iii. Pteroptochidae - Conopophagidae - Formicariidae. Field Mus. Publ. Zool. Chicago **13** part iii 1924 pp. 1–369 1 col. pl.

368.—Helms, O. Lidt om Rødstjerten (*Ruticilla phoenicura*) og dens ynglen i Denmark. Tidlig og sen forekomst af Munk (*Sylvia atricapilla*). Et møde med Hedelaerken (*Alauda arborea*). En Tur i Kristianias Slotspark. On the breeding of the Redstart in Denmark. Early arrival of the Blackcap. A meeting with the Treelark. A walk in the Slotspark at Christiania. Dansk Orn. Tids.. Kjøbenhavn **18** 1924 pp. 5–17.

369.—Hémery, M. Capture d'un Actiture Rousset en Bretagne. [*Erolia subruficollis*]. Rev. Fr. d'Orn. Paris **16** 1924 pp. 475–477 1 pl.

370.—Henderson, A. D. Nesting habits of the American Goshawk. Canad. Field-Nat. Ottawa **38** 1924 pp. 8–9.

371.—Henderson, A. D. The Common Loon in Alberta. Condor Berkeley Cal. **26** 1924 pp. 143–145 2 photos.

372.—Hendy, E. W. The Birds of Alderley Edge and district. Lancs. Ches. Nat. Darwen **16** 1924 pp. 165–172 213–220 259–270.

373.—Herrick, F. H. An Eagle Observatory. Auk Lancaster Pa. **41** 1924 pp. 89–105 3 pls.

374.—Herrick, F. H. Nests and nesting habits of the American Eagle. Auk Lancaster Pa. **41** 1924 pp. 213–231 3 pls.

375.—Herrick, F. H. The daily life of the American Eagle: late phase. Auk Lancaster Pa. **41** 1924 pp. 389–422 6 pls.; also pp. 517–541 4 pls.

376.—Heurn, F. C. van. H. P. Maasdam, een vroegtijdig gestorven ornitholoog. Jaarb. Club Nederl. Vogelk. Zevenbergen **14** 1924 pp. 124–127 7 photos.

377.—Hewitt, V. The Puffin (*Fratercula arctica arctica*). Ool. Rec. London **4** No. 2 1924 pp. 3–8 2 photos.

378.—Heyder, R. Ueber Stimme und Jungenpflege des Schwarzhalstauchers. Orn. Monatsb. **1924** pp. 40–42.

Hilger, J. *vide* Fischer.

379.—Hoadley, L. The independent differentiation of isolated chick primordia in chorio-allantoic grafts. The eye, nasal region, otic region, and mesencephalon. Biol. Bul. Wood's Hole Mass. **46** 1924 pp. 281–315 10 figs.

380.—Hoffmann, B. Führer durch unsere Vogelwelt. Vol. ii Von Bau und Leben der Vögel. Pp. 148 Leipzig and Berlin (Trubner) 1923 8vo [N.V.],

381.—Hoffman, R. Notes on the flight performance of the Wilson Snipe. Condor Berkeley Cal. **26** 1924 pp. 175–176.

382.—Hoffmann, B. von. *Certhia*-Mischsangern. Orn. Monatsb. Berlin **32** 1924 pp. 159–162.

383.—Hoffmann, B. Ornithologisches aus dem unteren Vintschgau, vom Garda- und Iseo-See, sowie aus Oberbozen. Verh. Orn. Ges. Bay. München **16** 1924 pp. 139–158.

384.—Hoffmann, W. E. The relation of the Crow to Pecan culture. Wilson Bull. Oberlin **36** 1924 pp. 175–184.

385.—Holder, F. W. Bird notes from the Southport coast. Lancs. Ches. Nat. Darwen **17** 1924 pp. 13–18.

386.—Holm, O. En riporre [*Lagopus mutus*]. Fauna och Flora Stockholm **1924** pp. 177–179 2 photos; also E. **Lonnberg** pp. 180–182.

387.—Holm, O. Fjällgåsen, *Anser erythropus*, inom Västerbottens län. Fauna och Flora Stockholm **1924** pp. 193–199.

388.—Holmboe, J. Hvad lirypen lever av i Norge. [The food of *Lagopus* in Norway]. Bergens Mus. Aarbok for **1922-23** 1924 No. 5 pp. 1–53.

389.—Holstein, V. Sæd-gaasens daglige liv. [Daily life of *Anser segetum*]. Dansk. Orn. Tids. Kjøbenhavn **18** 1924 pp. 137–140.

390.—Hommes, J. H. On the development of the clavicula and the sternum in Birds and Mammals. Tijdschr. Ned. Dierk. Ver. Amsterdam (2) **19** 1924 pp. 10–51 5 pls.

391.—Horne, E. A Swallow's method of feeding young with flies. Brit. Bds. London **17** 1924 pp. 306–307.

392.—Horne, E. and **Tucker,** B. W. The oviposition of the Cuckoo. Brit. Bds. London **17** pp. 214–216.

393.—Hørring, R. Fuglene ved de danske Fyr i 1921. The birds at the Danish lighthouses in the year 1921. 39th report on Danish birds (Danish). Videns. Medd. nat. For. Kjøbenhavn **76** 1923 pp. 147–192.

394.—Hortling, I. Flyttfåglar på Östersjön. [Migration notes in the southern Baltic.] Dansk Orn. Tids. Kjøbenhavn **18** 1924 pp. 80–84.

395.—Hortling, I. Die Krähe (*Corvus c. cornix* L.) als Zugvogel in Finnland. Ornis Finn. Helsingfors **1** 1924 pp. 25–31 map.

396.—**Howe, F.** Nest and egg of the Gang-gang Cockatoo. Emu Melbourne **24** 1924 pp. 67–70.

397.—**Howell, A. H.** Birds of Alabama. Pp. 1–384 7 pls. 31 figs. Montgomery Ala. (Brown Printing Co.) 1924 8vo.

398.—**Hubbard, H. W.** A Frigate Bird at Peitaiho. China J. Sci. Arts Shanghai **2** 1924 pp. 560–561 fig.

Hubbard, H. W. *vide* Wilder.

399.—**Huckle, C. H.** On the Birds of Ascension and St. Helena. Ibis London **1924** pp. 818–821.

400.—**Hughes, J. S.** and **Payne, L. F.** Influence of ultra-violet light on young laying hens. Science New York **60** 1924 pp. 549–550.

401.—**Humphreys, G. R.** Observations on a female Cuckoo. Irish Nat. Dublin **33** 1924 pp. 118–121.

402.—**Husband, R. A.** Variability in *Bubo virginianus* from Rancho La Brea. Condor Berkeley Cal. **26** 1924 pp. 220–225 5 graphs.

403.—**Huxley, J. S.** Some further notes on the courtship behaviour of the Great Crested Grebe. Brit. Bds. London **18** 1924 pp. 129–134.

404.—**Huxley, J. S.** Some points in the breeding behaviour of the Common Heron. Brit. Bds. London **18** 1924 pp. 155–163.

405.—**Huxley, J. S.** and **Murray, P. D. F.** A note on the reactions of chick chorio-allantois to grafting. Anat. Rec. Philadelphia **28** 1924 pp. 385–388 1 pl.

406.—**Idrac, P.** Contributions à l'étude du vol des albatros. C.R. Acad. Sci. Paris **179** 1924 pp. 28–30.

407.—**Idrac, P.** Etude théorique des manoeuvres des albatros par vent croissant avec l'altitude. C.R. Acad. sci. Paris **179** 1924 pp. 1136–1139 1456.

408. –**Ihering, H. von.** Notas oológicas sobre los Cucúlidos. Hornero Buenos Aires **3** 1924 pp. 244–246.

409.—**Ihering, H. v.** Die Kreide-Eocän-Ablagerungen der Antarktis. N. Jahrb. Min. Stuttgart Beil. Bd. **51** 1924 pp. 240–301.

Inglis, C. M. *vide* Fletcher.

410.—**Ingram, G. C. S.** and **Salmon, H. M.** The Turtle-Dove in Glamorganshire. Some breeding notes. Brit. Bds. London **18** 1924 pp. 2–10 5 photos.

411.—**Ingram, G. C. S.** and **Salmon, H. M.** Ornithological Notes, 1919–20. Trans. Cardiff Nat. Soc. **53** 1923 pp. 54–56 photo.

Iredale, T. *vide* Kinghorn.

412.—**Iwanow, E.** De la fecondation artificielle des Mammifères et des Oiseaux. C.R. Acad. Sci. Paris **178** 1924 pp. 1854–57.

413.—**Iwata, I.** How can the sex of a carrier-pigeon be decided even in the young? Tori Tokyo **4** Nos. 16-17 1924 pp. 80–91 6 figs. [Japanese.]

Jabouille, P. *vide* Delacour.

414.—**Jacobi, A.** Zoologische Ergebnisse der Walter Stötznerschen Expeditionen nach Szetschwan, Osttibet und Tschili auf Grund der Sammlungen und Beobachtungen Dr. Hugo Weigolds. 3 Teil. No. 5 Hemipodii und Galli von A. **Jacobi.** No. 6 Passeres und Picariae I von Dr. E. **Stresemann.** No. 7 Picariae II von Dr. B. **Rensch.** No. 8 Turdinae I Teil von O. **Kleinschmidt.** No. 9 Turdinae II Teil von Dr. B. **Rensch.** No. 10 Accentoridae von Dr. B. **Rensch.** No. 11 Motacillidae von Dr. B. **Rensch.** No. 12 Striges von Dr. E. **Stresemann.** Abh. Ber. Mus. Dresden **16** No. 2 1924 pp. 1–70.

415.—**Jaquet, M.** Conformation anormale d'un poulet. Rev. Suisse Zool. Genève **31** 1924 pp. 337–350 11 figs.

416.—**Jarlund, J. P. C.** Lidt om Staeren (*Sturnus vulgaris*) i vinteren 1923–24. Flora og Fauna Kjøbenhavn **1924** pp. 89–95.

417.—**Jensen, J. K.** The great Grosbeak year. Auk Lancaster Pa. **41** 1924 pp. 569–572.

418.—**Jespersen, P.** Silkehalen (*Ampelis garrulus* L.) i Danmark vinteren 1918–19. Dansk Orn. Tids. Kjøbenhavn **18** 1924 pp. 65–79 2 maps.

419.—**Jespersen, P.** The frequency of birds over the high Atlantic Ocean. Nature London **114** 1924 pp. 281–283 2 charts.

Jewitt, S. G. *vide* Gabrielson.

420.—**Johansen,** H. Russiche ornithologische Arbeit während der letzten Jahre. Journ. Orn. Berlin **72** 1924 pp. 68–73.

421.—**Johnsen,** S. Havhesten (*Fulmarus glacialis*). En ny rugefugl for Norge. Naturen Bergen **48** 1924 pp. 193–200 figs.

422.—**Jordans,** A. v. Die Ergebnisse meiner zweiten Reise nach Mallorca. Journ. Ornith. Berlin **72** 1924 pp. 145–170 381–410 518–536.

423.—**Jordans,** A. v. Eine Krähenscharbe am Niederrhein gefangen. Orn. Monatsb. Berlin **32** 1924 pp. 170–171.

424.—**Jouard,** H. Contribution à l'étude du Grimpereau Costa (*Certhia familiaris macrodactyla* Brehm, 1820). Rev. Fr. d'Orn. Paris **16** 1924 pp. 259–263 278–282.

425.—**Jourdain,** F. C. R. The light and dark-breasted Brent Geese. Brit. Bds. London **18** 1924 pp. 49–52.

426.—**Jourdain,** F. C. R. Mealy Redpolls in Berkshire. Brit. Bds. London **18** 1924 p. 54.

427.—**Jourdain,** F. C. R. On a Lesser Ringed Plover from Biskra. Bul. Bt. Orn. Cl. London **44** 1924 pp. 37–38.

428.—**Jourdain,** F. C. R. On the dark-breasted and light-breasted forms of the Brent Goose (*Branta bernicla*). Bul. Bt. Orn. Cl. London **44** 1924 pp. 84–86.

429.—**Jourdain,** F. C. R. Ornithological report for 1923. Proc. Rep. Ashmolean N. H. Soc. Oxford for **1923** 1924 pp. 12–15.

430.—**Joy,** N. H. Migrants of the Reading Sewage Farm. Brit. Bds. London **18** 1924 pp. 11–13.

431.—**Jull,** M. A. The relation of antecedent egg production to the sex ratio of the Domestic Fowl. J. Agric. Res. Washington **28** 1924 pp. 199–224.

432.—**Kaempfer,** E. Ueber das Vogelleben in Santo Domingo. Journ. Ornith. Berlin **72** 1924 pp. 178–184.

433.—**Kahn,** L. Sur la diminution apparent de la résistance d'une aile agitée dans un courant d'air, et son application à la théorie du vol des oiseaux. C.R. Acad. Sci. Paris **178** 1924 pp. 922–924 3 figs.

434.—**Kaiser,** L. L'innervation segmentale de la peau chez le Pigeon (*Columba livia var. domestica*). Arch. Néerl. Sci. Soc. Holl. Haarlem **9** 1924 pp. 299–379 98 textfigs.

435.—**Kamner,** A. Der Bartgeier (*Gypaetus barbatus* L.). Verh. Mitt. siebenb. Ver. Naturw. Hermannstadt **72-74** 1924 pp. 170–193 map.

436.—**Kamner,** A. Ornithologische Miscellen. Verh. Mitt. siebenb. Ver. Naturw. Hermannstadt **72-74** 1924 pp. 258–259.

437.—**Karpen,** N. V. Sur le mecanisme du vol à voile, pp. 253–255. Sur l'emploi des fluctuations horizontales du vent par les oiseaux voiliers. pp. 255–259. Bul. Acad. Roum. Bucarest **8** 1923.

438.—**Karpen,** N. V. Sur l'emploi des fluctuations horizontales du vent par les oiseaux voiliers. C.R. Acad. Sci. Paris **178** 1924 pp. 191–192.

439.—**Katayama,** T. Ueber die Verdaulickkeit der Futtermittel bei Hühnern. Bul. Imp. Agr. Exper. Sta. Japan Nishigahara **3** 1924 pp. 1–78 2 pls.

440.—**Kaufman,** L. Cell growth and body growth. Investigations on Pigeons. Bul. Intern. Acad. Pol. Cracovie **1924** B pp. 281–295.

441.—**Kaupp,** B. F. The function of grit in the gizzard of the Fowl. J. Agric. Res. Washington **27** 1924 pp. 413–415 pl.

442.—**Kaupp,** B. F. and **Dearstyne,** R. S. Fowl typhoid, its dissemination and control. J. Agric. Res. Washington **28** 1924 pp. 75–78.

443.—**Kayser,** C. Ueber das Vorkommen von *Erismatura leucocephala* (Scop.). Ueber den Gesang des Schwarkopfes *Sylvia a. atricapilla* (L.). Anz. Orn. Ges. Bay. München no. **8** 1924 pp. 66–67.

444.—Kennedy, J. N. Birds of Lake Geneva. Ibis London **1924** pp. 592–593.

445.—Kinghorn, J. R. Notes on a trip to Upper Colo, N.S.W. Emu Melbourne **24** 1924 pp. 134–141 2 photos.

446.—Kinghorn, J. R. and Iredale, T. Rediscovery of the White-backed Wren, *Malurus leuconotus* Gould. Emu Melbourne **24** 1924 pp. 59–60.

Kinghorn, J. R. *vide* Le Soeuf.

447.—Kinnear, N. B. On a new form of *Graucalus* and of *Myzomela*. Bul. Bt. Orn. Cl. London **44** 1924 pp. 68–69.

448.—Kinnear, N. B. New races of *Tephrodornis* and *Garrulax*. Bul. Bt. Orn. Cl. London **44** pp. 102–103.

449.—Kinnear, N. B. New races of *Timalia*, *Pnoepyga*, *Schoeniparus*, *Thringorhina* and *Drymacataphus* from India and Tonkin. Bul. Bt. Orn. Cl. London **45** pp. 9–11.

450.—Kinnear, N. B. A new Swallow from Siam. Bul. Bt. Orn. Cl. London **45** 1924 pp. 27–28.

451.—Kleinschmidt, O. Nachruf an Dr. Victor Ritter von Tschusi zu Schmidhoffen † 5 März 1924. Falco Halle **20** 1924 pp. 1–3.

452.—Kleinschmidt, O. Wie entstanden Formenkreise? Zugleich Antwort auf Weigolds Frage: "Woran erkennt man ein Entwicklungszentrum. Falco Halle **20** 1924 pp. 3–8.

453.—Kleinschmidt, O. Ein zweites Exemplar von *Garrulus glandarius* aberratio *reiserorum*. Falco Halle **20** 1924 pp. 8–9.

Kleinschmidt, O. *vide* Jacobi.

454.—Klinge, M. Skovsneppens (*Scolopax rusticola*) foraarstraek gennem Danmark 1924. Dansk Orn. Tids. Kjøbenhavn **18** 1924 pp. 96–106.

455.—Kloss, C. B. The forms of *Criniger gularis* and *C. gutturalis*. J. Malay Br. R. Asiat. Soc. Singapore **2** 1924 p. 71.

456.—Kloss, C. B. A new Siamese Bulbul. J. Nat. Hist. Soc. Siam Bangkok **6** 1924 p. 291.

Kloss, C. B. *vide* Chasen.

Kloss, C. B. *vide* Robinson.

457.—Knobel, E. M. Some remarks on the pelvic bones of Parrots [and their use in sexing these birds]. Proc. Zool. Soc. London **1924** pp. 789–792 1 fig.

458.—Koelz, W. Some Michigan Bird records. Wilson Bul. Oberlin **35** 1923 pp. 37–40.

459.—Koenig, A. Die Saenger (Cantores) Aegyptens. Journ. Ornith. Berlin **72** Sonderhft. 1924 pp. xiv + 277 2 pls.

Kögl, F. *vide* Fischer.

460.—Kolderup, C. F. Stenindholdet i kraasen hos norske liryper. Bergens Mus. Aarb. for **1923-24** 1924 no. 4. pp. 1–34. [Norwegian with English résume.]

461.—Kolmer, W. Ueber das Auge des Eisvogels (*Alcedo attis attis*). Arch. ges. Physiol. Berlin **204** 1924 pp. 266-274 4 figs.

462.—Kolmer, W. Das Auge und das Sehen der Vögel. Verh. Zool. Bot. Ges. Wien **73** 1924 pp. (116)–(117).

463.—Koshantschikov, I. und Gerassimov-Moratschinsky, A. Ornithologische Notizen. Jahrb. Martjan. Staatmus. Minussinsk **1** 1923 pp. 60–66.

464.—Krohn, H. Welche Sinneswahrnehmungen vermitteln die gegenseitige Erkennung der Geschlechter bei den Vögeln? Beitr. Fortpfl.-biol. Vög. Berlin **1** 1924 pp. 22–25.

465.—Kuhk, R. Ueber die Brutdauer des Huhnerhabichts. Orn. Monatsb. Berlin **32** 1924 pp. 157–158.

Kuiper, K. *vide* Lotsy.

466.—Kuroda, N. On an apparently new form of Ural Owl from the Pacific side of Hondo, Japan, pp. 15–16. Tokyo (Publ. by author) 1924 8vo.

467.—Kuroda, N. A note on the Japanese Quail. Auk Lancaster Pa. **41** 1924 pp. 114–123.

468.—Kuroda, N. A new Pigmy Woodpecker from Tonkin. Bul. Bt. Orn. Cl. **44** 1924 p. 47.

469.—Kuroda, N. New races of *Lagopus*, *Passer*, *Certhia*. Bul. Bt. Orn. Cl. London **45** 1924 pp. 15–17.

470.—Kuroda, N. *Locustella ochotensis* and *L. pleskei.* Dobuts. Zasshi Tokyo **36** 1924 pp. 453–459 [in Japanese].

471.—Kuroda, N. A list of Birds in the collection of the Science College Museum, Kyoto Imperial University. Tori Tokyo **4** Nos. 16-17 1924 pp. 68–80 [in English].

472.—Kuroda, N. On a third specimen of the rare *Pseudotadorna cristata* Kuroda. Tori Tokyo **4** No. 18 1924 pp. 171–184 1 pl. 4 textfigs. [in Japanese and English.]

473.—Kuroda, N. On the Japanese Geese. Tori Tokyo **4** No. 18 1924 pp. 194–205 6 textfigs. [Japanese and English.]

474.—Kuroda, N. and **Mori,** T. Description of a new subspecies of *Sittiparus varius* from the Korean Peninsula. Dobuts. Zasshi **36** 1924 pp. 314–318. [Japanese with English résumé.]

475 —La Baume, W. Ueber zwei im Weichsel-Nogat-Delta erlegte Zwergschwäne (*Cygnus bewickii* Yarrell). Ber. bot.-zool. Ver. Danzig **44** 1922 pp. 27–30.

476.—Lafond, E. J. Notes ornithologiques prises en 1922 dans les environs de Genève, entre Rhône et Jura. Bul. soc. zool. Genève **3** fasc. 3 1924 pp. 32–34.

477.—Lang, H. *Ampullarius* and *Rostrhamus* at Georgetown, British Guiana. Nautilus Boston Mass. **37** 1924 pp. 1–5 [sep. pag. ?] 1 pl.

478.—Lataste, F. Présentation d'un Poulet pygoméle. Proc. verb. soc. linn. Bordeaux **75** 1924 pp. 146–148.

479.—Lataste, F. Ovum aviteleinum, Ovum retroversum et Ovum caudatum. Proc.-verb. soc. linn. Bordeaux **75** 1924 pp. 162–164.

480.—Lataste, F. Présentation d'une Collection d'Oiseaux du Chili. Proc.-verb. soc. linn. Bordeaux **75** 1924 pp. 166–172.

481.—Lataste, F. L'oeuf de Poule chemine dans l'oviducte gros bout en avant. Théorie et vérification directe. Proc.-verb. soc. linn. Bordeaux **76** 1924 pp. 47–53. See also A. **Baudrimont.**

482.—Lataste, F. "Ovum utrinque caudatum." Proc.-verb. soc. linn. Bordeaux **76** 1924 pp. 95–96. Also pp. 98–99 104–105 108–117.

483.—Latimer, H. B. The variability in weight of Leghorn chickens at hatching, thirty-five days and maturity. Amer. Nat. New York **58** 1924 pp. 278–282.

484.—La Touche, J. D. Chinese Bulbuls. Ibis London **1924** pp. 196–197.

485.—La Touche, J. D. On the Birds of South-East Yunnan, S.W. China. Pt. iv. Ibis London **1924** pp. 284–307.

486.—Laubenfels, M. W. de. Summer Birds of Brownsville, Texas. Wilson Bull. Oberlin **36** 1924 pp. 161–175.

487.—Laubmann, A. Zur Nomenclatur der Alcedinidae. Anz. Orn. Ges. Bayern München No. **8** 1924 pp. 68–69.

488.—Laubmann, A. Ueber die generische Stellung von *Halcyon leucogaster* Fraser. Arch. Natg. Berlin **89 A** Heft 12 1924 pp. 190–196.

489.—Laubmann, A. Bemerkungen über Eisvögel aus Deutsch-Neuguinea mit besonderer Berücksichtigung der von Dr. L. von Wiedenfeld dortselbst gesammelten exemplare. Verh. Orn. Ges. Bayern München **16** 1924 pp. 3–31.

490.—Laubmann, A. Conte Tommaso Salvadori†. Nachruf. Verh. Orn. Ges. Bayern München **16** 1924 pp. 85–86.

491.—Laubmann, A. Conspectus generum avium Alcedinidarum. Verh. Orn. Ges. Bayern München **16** 1924 pp. 129–138.

492.—Laubmann, A. Beiträge zur Kenntnis des Verlaufes der Handschwingenmauser bei den Alcedinidae ii. Verh. Orn. Ges. Bay. München **16** 1924 pp. 184–186.

493.—Lavauden, L. La chasse et le faune cynégétique en Tunisie. 2e ed. pp. 1–50 maps and illustr. Tunis (Guénard and Franchi) 8vo 1924.

494.—Lavauden, L. Note sur Pygargue de Corée (*Haliaëtus niger* Heude). Ann. Mus. Hist. nat. Marseille **19** 1924 pp. 1–5 (sep. pag. ?] pl. 8.

495.—Lavauden, L. Sur les oiseaux des Alpes.-Maritimes. Rev. Fr. d'Orn. Paris **16** 1924 p. 250–256.

496.—Lavauden, L. Un caractère adaptive du Bec-croisé de l'Afrique du Nord. Rev. Fr. d'Orn. Paris **16** 1924 pp. 301–303 5 figs.

497.—Lavauden, L. Essai sur la Bartavelle [*Alectoris graeca saxatilis*]. Bul. St. Hubert Club de France 1923–24. Also Rev. Fr. d'Orn. Paris **16** 1924 pp. 397–399 map.

498.—Law, S. C. Pet Birds of Bengal. Vol. i. pp. xxxii + 366 map and illustr. Calcutta (Thacker Spink) 1923 8vo.

499.—Law, S. C. Some observations on *Pyrrhulanda grisea.* Ibis London **1924** pp. 645–647, textfig.

500.—Law, S. C. Observations on the breeding of some common Birds in the vicinity of Calcutta. J. Asiat. Soc. Beng. Calcutta **19** 1924 pp. 147–151 1 pl.

501.—Law, S. C. The incubation period of Bulbuls' eggs. J. Bombay N. H. Soc. **29** 1924 pp. 1056–1058.

502.—Lengerken, H. v. Tragen Pieper (*Anthus*) ihre gefährdeten Jungen fort ? Werden eingegangene Vogeljunge von den Eltern aus den Nestern entfernt ? Zool. Anz. Leipzig **59** 1924 pp. 30–32.

503.—Leopold, N. F. The Kirtland's Warbler in its summer home. Auk Lancaster Pa. **41** 1924 pp. 44–58 2 pls.

504.—Leroy, A. Sur la transparence des coquilles d'oeufs de poule et les modifications qu'elle subit avec le temps. C.R. Acad. Sci. Paris **178** 1924 pp. 2129–2131.

505.—Le Soudier et Verge, J. Le bacille de Preisz-Nocard chez la Poule. Ann. Inst. Pasteur Paris **38** 1924 pp. 358–365.

506.—Le Souef, A. S. and Kinghorn, J. R. Notes on the Golden-shouldered and Hooded Parrots (*Psephotus chrysopterygius* and *P. dissimilis*). Emu Melbourne **24** 1924 pp. 1–3 col. pl.

507.—Lewis, F. Observations on the Mutton birds [*Puffinus tenuirostris*] of Phillip Island, Victoria. Emu Melbourne **24** 1924 pp. 86–90.

508.—Lewis, H. F. List of Birds recorded from the Island of Anticosti, Quebec. Canad. Field-Nat. Ottawa **38** 1924 pp. 43–46, 72–75, 88–90, 125–127, 146–147.

509.—Lewis, M. R. Spontaneous rhythmical contraction of the muscles of the bronchial tubes and air sacs of the chick embryo. Amer. J. Physiol. Baltimore **68** 1924 pp. 385–388.

510.—Lincoln, F. C. Returns from Banded Birds, 1920 to 1923. Bul. U.S. Dept. Agr. Washington No. **1268** 1924 pp. 1–55.

511.—Lincoln, F. C. Banding notes on the migration of the Pintail. Condor Berkeley Cal. **26** 1924 pp. 88–90.

512.—Lincoln, F. C. Instructions for Banding Birds. U. S. Dept. Agric. Washington Miscell. Circ. **18** 1924 pp. 1–26 28 figs.

513.—Lincoln, F. C. A "territory" note on the Belted Kingfisher. Wilson Bull. Oberlin **36** 1924 pp. 113–115.

Lindsay, C. *vide* Archey.

514.—Lisi, L. de. Caratteri sessuali dei gangli simpatici perisurrenali degli uccelli. Monitore Zool. Ital. Firenze **35** 1924 pp. 62–68 2 pls.

515.—Lloyd, H. The Birds of Ottawa, 1923. Revised to March 20, 1923. Canad. Field-Nat. Ottawa **38** 1924 pp. 10–16.

Locatelli, E. *vide* Pugliese.

516.—[Long, S.] Maurice Charles Hilton Bird, 1857–1924. Trans. Norfolk Nat. Hist. Soc. Norwich **11** 1924 pp. 608–611 portr.

517.—Long, S. H. and Riviere, B. B. Fauna and flora of Norfolk. Additions to Part xi—Birds (eighth list), 1919-23. Trans. Norfolk Nat. Hist. Soc. Norwich **11** 1924 pp. 586–592.

518.—Longstaff, T. G. Notes from Spitsbergen, 1923. Ibis London **1924** pp. 480–495.

519.—Longstreet, R. J. The new Brown Pelican Rookery on the Florida east coast. Wilson Bull. Oberlin **36** 1924 pp. 65–68.

520.—Lönnberg, E. On the scientific names of the light and dark-breasted Brent Geese. Brit. Bds. London **18** 1924 pp. 135–138. See also E. **Hartert** pp. 197–198.

521.—Lönnberg, E. Stepphöken, *Circus macrourus* Gmelin, häckfågel i Sverige. Fauna och Flora Stockholm **1924** pp. 25–30 photo.

522.—L[önnberg], E. Svarta storken åter häckande i Bergslagen. Fauna och Flora Stockholm **1924** pp. 31–35 2 photos.

523.—L[önnberg], E. Den rosenhövdade anden, *Rhodonessa caryophyllacea* Lath. utrotad. Fauna och Flora **1924** pp. 49–52 col. pl.

524.—Lönnberg, E. Något om tjäderraser [On the races Ptarmigan]. Fauna och Flora Stockholm **1924** pp. 66–74 3 figs.

525.—Lönnberg, E. Ett bidrag till den svenska faunans invandrings-historia. [Some account of recent changes in the Swedish avifauna.] Fauna och Flora Stockholm **1924** pp. 97–119.

526.—Lönnberg, E. Till kännedomen om den Sydliga Ljung-piparen, *Charadrius apricarius oreophilus* A. C. Meinertzh. och dess förekomst i Sverige. Fauna och Flora Stockholm **1924** pp. 145–156 2 photos.

527.—Lönnberg, E. Den bruna gladan *Milvus migrans* Bodd., som medlem av den svenska faunan. Fauna och Flora Stockholm **1924** pp. 200–203 photo.

528.—Lönnberg, E. Salskraken *Mergus albellus* Lin. häckande i mellersta Lappland. Fauna och Flora Stockholm **1924** pp. 211–216.

529.—Lönnberg, E. Ha vi twenne raser av silltrut, *Larus fuscus*, i Sverige? Fauna och Flora Stockholm **1924** pp. 247–258.

530.—Lönnberg, E. The Goshawk of northern Russia. Ibis London **1924** pp. 193–195.

531.—Lönnberg, E. Notes on some Birds from Kansu, China. Ibis London **1924** pp. 308–328.

532.—Lönnberg, E. The name of the Golden Plover. Ibis London **1924** pp. 388–391.

Lönnberg, E. *vide* Holm.

533.—Loomis, L. M. On the specific name of three Petrels. Emu Melbourne **23** 1924 pp. 282–284.

534.—Lord, C. E. and **Scott,** H. H. A synopsis of the Vertebrate Animals of Tasmania. Pp. viii + 340 many illustr. Hobart (Oldham) 1924 8vo [Birds pp. 118–231].

535.—Lotsy, J. P. and **Kuiper,** K. A preliminary statement of the results of Mr. Houwink's experiments concerning the origin of some domestic animals. Chapter vi. Hybridization experiments. Genetica 's Gravenhage **6** 1924 pp. 221–277 7 pls.

536.—Low, G. C. The literature of the Charadriiformes from 1894–1924, with a classifiaction of the order and lists of the genera, species and subspecies. Pp. xii + 220 London (Witherby) 1924 8vo.

537.—Lowe, P. R. Note on the occurrence of *Ionornis martinica* on Tristan and *Porphyrula alleni* on Ascension. Bul. Bt. Orn. Cl. London **44** 1924 p. 72.

538.—Lowe, P. R. Some notes on the Fregatidae. Nov. Zool. Tring **31** 1924 pp. 299–313 2 pls.

539.—Lowe, P. R. On the presence of Broadbills (*Eurylaemidae*) in Africa. [Anatomy of *Smithornis*]. Proc. Zool. Soc. London **1924** pp. 279–291 5 text-figs.

540.—Lowe, P. R. On the anatomy and systematic position of the Madagascar Bird *Mesites* (*Mesoenas*), with a preliminary note on the osteology of *Monias*. Proc. Zool. Soc. London **1924** pp. 1131–1152 7 figs.

Lowndes, J. *vide* Plimmer.

541.—Loyd, L. R. W. The Protection of Birds. An indictment. Pp. viii + 88 London (Longmans) 1924 sm. 8vo.

542.—Lübcke, Die Vogelwelt des Müritzgebietes. Arch. Ver. Natg. Güstrow **75** 1922 pp. 146–154.

543.—Lubosch, W. Bemerkung zu Arbeit von Clara: Das Fettgewebe der Vögel. Anat. Anz. Jena **58** 1924 pp. 205–208.

544.—Lucanus, F. von. Eine Erwiderung zur Frage der Zugstrassen der Vögel. Journ. Ornith. Berlin **72** 1924 pp. 475–478.

545.—Lüttschwager, H. Die Vogelwelt in der Stadt Elbing. Ber. bot.-zool. Ver. Danzig **44** 1922 pp. 8–16.

546.—Lüttschwager, H. Ornithologische Beobachtungen am Drausensee bei Elbing. Orn. Monatsb. Berlin **32** 1924 pp. 10–12.

547.—Lynes, H. On the Birds of North and Central Darfur, with notes on the West-Central Kordofan and North Nuba Provinces of the British Sudan. Ibis London **1924** pp. 399–446 pls. xiv–xxiii. Pt. ii pp. 648–719.

548.—Lynes, H. An ornithological visit to N. W. Marocco (Spanish Province of Yebala). Nov. Zool. Tring **31** 1924 pp. 49–103 map and 4 pls. (photos).

549.—Lyon, W. I. Bird banding Department (of the Wilson Bulletin). Wilson Bull. Oberlin **36** 1924 pp. 37–53 99–104 141–143 217–218.

550.—MacGillivray, W. A contribution on the life-story of the Australian Pratincole. Emu Melbourne **24** 1924 pp. 81–85 5 photos.

551.—MacGillivray, W. A spring excursion into southwestern Queensland. Emu Melbourne **24** 1924 pp. 13–24 90–101 5 photos map.

552.—McGilp, J. N. and **Parsons,** F. E. Bird observations made by delegates to the Tasmanian R.A.O.U. camp-out. Emu Melbourne **23** 1924 pp. 197–205.

553.—McGregor, R. C. Birds of Ilocos Norte Province, Luzon. Philippine J. Sci. Manila **25** 1924 pp. 111–121.

554.—McKeough, G. T. Notes on some Game Birds in the county of Kent, Ontario, season of 1924. Canad. Field-Nat. **38** 1924 pp. 187–188.

555.—MacPherson, J. Further notes on the Redeyed Bulbul. [*Otocompsa jocosa* in Australia.] Emu Melbourne **23** 1924 pp. 218–219.

556.—M'William, J. M. The roosting habits of the Rooks of Bute. Scot. Nat. Edinburgh **1924** pp. 5–7.

557.—Magee, M. J. Notes on the Purple Finch (*Carpodacus purpureus purpureus*). Auk Lancaster Pa. **41** 1924 pp. 606–610.

558.—Mailliard, J. Autobiography. Condor Berkeley Cal. **26** 1924 pp. 10–29 3 portr.

559.—Mailliard, J. Some new records from northeastern California. Condor Berkeley Cal. **26** 1924 pp. 213–217.

560.—Malssen, J. F. M. van. Avifauna van Harderwijk. Jaarb. Club Nederl. Vogelk. Zevenbergen **14** 1924 pp. 100–119.

561.—Mann, I. C. The pecten of *Gallus domesticus*. Q. J. Micros. Sci. London **68** 1924 pp. 413–422 21 textfigs.

562.—Marcucci, E. La morfologia del bacino dei Sauropsidi. Il pube degli Uccelli. Boll. Soc. Nat. Napoli **35** 1924 pp. 159–190 10 textfigs.

563.—Marelli, C. H. Elenco sistemático de la fauna de la Provincia de Buenos Aires (Procordados y Vertebrados). Extr. Mem. Ministerio de Obras Publicas Buenos Aires for **1922-3** 1924 pp. 536–682 [Birds pp. 597–665].

564.—Marelli, C. A. y **Ubach,** F. A. Observaciones de patologia ornithológica. Hornero Buenos Aires **3** 1924 pp. 239–243 2 figs.

565.—Marlow, T. The nidification of the Masked Finfoot, *Heliopais personata*. Comp. Ool. Santa Barbara Cal. **1** 1924 pp. 25–29.

566.—Masarey, A. Das Vorkommen von Raben- und Nebelkrähe im Südtessin. Orn. Monatsb. Berlin **32** 1924 pp. 100–104. *See also* A. **Hess** p. 143.

567.—Mathews, G. M. The Birds of Australia. Vol. **11** pts. 4–9 pp. 201–593 + i–xii pls. 509–541; also Check List pt. 3 pp. 157–243 London (Witherby) 1924 4to.

568.—Mathews, G. M. Note on synonymy and new names. Bul. Bt. Orn. Cl. London **44** 1924 pp. 69–70.

569.—Mathews, G. M. A new species of *Phonygammus*. Bul. Bt. Orn. Cl. London **45** 1924 p. 17.

570.—Mathews, G. M. New names for Australian Birds. Bul. Bt. Orn. Cl. London **45** 1924 p. 41.

Mathews, G. M. *vide* Alexander.

571.—Matsudaira, Viscount Y. On the migration and habits of Shearwaters in Sagami Bay. Tori Tokyo **4** No. 18 1924 pp. 190–193. [In Japanese.]

572.—Mavro, F. Il trattamento frigorifico delle uova (di Gallina) e la sua influenza sulla capacita di sviluppo della macula germinativa. Atti soc. ital. sc. nat. Milano **62** 1924 pp. 239–246.

573.—May, J. B. Bird banding at Thomasville, Georgia. Auk Lancaster Pa. **41** 1924 pp. 451–462 2 pls.

574.—Mayrs, E. B. Secretion as a factor in elimination by the Bird's kidney. J. Physiol. Cambridge **58** 1924 pp. 276–287.

575.—Mazza, F. Correlazione di sviluppo fra la cellule interstiziali del Leydig ed il metacroismo della ranfoteca in alcuni uccelli. Rend. Unione Zool. pp. 37–39 in Monitore Zool. Ital. Firenze **35** 1924.

576.—Meinertzhagen, A. C. A review of the genus *Burhinus*. Ibis London **1924** pp. 329–356.

577.—Meinertzhagen, R. On the Song-Thrush of the Island of Mull. Bul. Bt. Orn. Cl. London **44** 1924 p. 37.

578.—Meinertzhagen, R. On two new African kingfishers. Bul. Bt. Orn. Cl. London **44** 1924 pp. 44–45.

579.—Meinertzhagen, R. New races of *Picus chlorolophus*. Bul. Bt. Orn. Cl. London **44** 1924 pp. 53–57.

580.—Meinertzhagen, R. On the European and American Snipes. Bul. Bt. Orn. Cl. London **44** 1924 pp. 58–61.

581.—Meinertzhagen, R. An account of a journey across the southern Syrian desert from Amman in Transjordania to Ramadi on the Euphrates. Ibis London **1924** pp. 87–101 pls. vi–ix. [Map and photos.]

582.—Meinertzhagen, R. Notes on a small collection of Birds made in Iraq in the winter of 1922–23. Ibis London **1924** pp. 601–625.

583.—Meinertzhagen, R. A contribution towards the Birds of the Aden Protectorate. Ibis London **1924** pp. 625–642 pl. xxvi.

584.—Meinertzhagen, R. Birds at Egyptian Lighthouses. Ibis London **1924** pp. 643–644.

585.—Meinertzhagen, R. A note on the Hedge Sparrows (*Accentor modularis*) of the British Islands. Scot. Nat. Edinburgh **1924** pp. 45–46.

586.—Meinertzhagen, R. A note on Scottish Wrens (*Troglodytes*) with characteristics of a newly defined Hebridean race. Scot. Nat. Edinburgh **1924** p. 135.

587.—Mell, R. Ueber floristisch-faunistische Formationen in Südchina mit besonderen Berücksichtigung der Ornis. ii. Teil. Journ. Ornith. Berlin **72** 1924 pp. 279–314.

588.—Menegaux, A. Etude d'une collection d'oiseaux de l'Afrique Orientale Anglaise et de l'Ouganda. Avec notes de route de M. Guy Babault. Sur une petite collection d'oiseaux faites par M. G. Babault au Cap de Bonne Esperance. Pp. 1–157 6 pls. Map Paris 4to.

589.—Michel, J. und **Reiser,** O. Zwei Fälle des Vorkommens des Eissturmvogels, *Fulmarus glacialis*, im Inneren des europäischen Festlandes. Journ. Orn. Berlin **72** 1924 pp. 99–100.

590.—Miczynski, K. Notes ornithologiques. Spraw. Kom. fizyog. Krakow **56** 1922 pp. 181–184. [Polish with German résumé.]

591.—Miller, L. Anomalies in the distribution of fossil Gulls. Condor Berkeley Cal. **26** 1924 pp. 173–174.

592.—Miller, L. *Branta dickeyi* from the McKittrick Pleistocene. Condor Berkeley Cal. **26** 1924 pp. 178–180 1 fig.

593.—Miller, W. De W. Variations in the structure of the aftershaft and their taxonomic value. Amer. Mus. Nov. New York no. **140** pp. 1–7 8 figs.

594.—Miller, W. de W. Notes on the genera of Caciques (*Cacicus*). Auk Lancaster Pa. **41** 1924 pp. 463–467.

595.—Miller, W. De W. Further notes on Ptilosis. Bul. Amer. Mus. N. H. New York **50** 1924 pp. 305–331.

596.—Miranda-Ribeiro, A. de. Nota critica sobre a ornis do Itatiaya. Arch. Mus. Rio de Janeiro **24** 1923 pp. 239–255.

597.—Mitchell, H. H. Catalogue of the Birds of Saskatchewan. Canad. Field-Nat. Ottawa **38** 1924 no. 6 Special Number pp. 101–118 map 6 photos.

Mitchell, H. H. *vide* Hamilton.

598.—Modi, J. J. The Owl in Folklore. J. Asiat. Soc. Bengal Calcutta **19** 1924 pp. 51–60.

599.—Moffat, C. B. Notes on some Ruffs in the Zoo. Irish Nat. Dublin **33** 1924 pp. 25–29.

600.—Molčanow, L. Sur l'endemisme de la faune ornithologique de la Crimée. Ann. Mus. Zool. Petrograd **21** 1916 pp. 40–58. [In Russian.]

601.—Moltoni, E. Osservazioni sui *Puffinus* raccolti dal Capitano Loche in Algeria. Atti soc. ital. sci. nat. Milano **63** 1924 pp. 218–220.

602.—Moltoni, E. L'Edredone in Italia, *Somateria mollissima mollissima* (L.). Natura Milano **14** 1923 pp. 88–92 photo.

603.—Moltoni, E. Su di un ibrido di Pernice d'Africa (*Alectoris barbara* subsp. ?) e di Pernice Greca (*Alectoris graeca* subsp. ?). Natura Milano **15** 1924 pp. 137–142 photos.

604.—Momiyama, T. Descriptions of ten new subspecies from the Seven Islands, Japan. Dobuts. Zasshi Tokyo **1923** pp. 400–415. [In Japanese.]

605.—Momiyama, T. A list of Birds collected on Hachijojima in the Seven Islands of Izu, Japan. Tori Tokyo **4** no. 16–17 1924 pp. 100–109. [Japanese.]

606.—Moncrieff, P. Birds seen along the west coast to the Franz Josef Glacier, New Zealand. Emu Melbourne **24** 1924 pp. 61–67.

607.—Monnier. Oiseaux insectivores et sylviculture à Madagascar. Rev. Fr. d'Orn. Paris **16** 1924 pp. 297–301 1 pl.

608.—Morey, F. Birds killed on migration at St. Catherine's Lighthouse. Proc. I. of Wight N. H. Soc. **1** 1923 pp. 125–127.

609.—Morgan, A. M. The nest and eggs of *Diaphorillas textilis myal.* S. Austr. Orn. Adelaide **7** 1924 pp. 159–160.

Mori, T. *vide* Kuroda.

610.—Mouquet, A. et **Girard.** Phénomènes constatés chez une Buse féroce avant des lésion des canaux semicirculaires. Bul. Muséum Paris **1924** pp. 44–51 128–129 4 figs.

611.—Mousley, H. A study of the home life of the Northern Parula and other Warblers at Hatley, Stanstead County, Quebec, 1921-22. Auk Lancaster Pa. **41** 1924 pp. 263–288 2 pls.

612.—Mousley, H. Further notes and observations on the birds of Hatley, Stanstead County, Quebec, 1919–1923. Auk Lancaster Pa. **41** 1924 pp. 572–589.

613.—Munn, P. W. Notes on the Birds of Minorca. Ibis London **1924** pp. 446–467 1 fig. [map].

614.—Munro, J. A. Notes on the relation of the Dipper (*Cinclus mexicana unicolor*) to fishing interests in British Columbia and Alberta. Canad. Field-Nat. Ottawa **38** 1924 pp. 48–50.

615.—Munro, J. A. A preliminary report on the destruction of birds at lighthouses on the coast of British Columbia. Canad. Field-Nat. Ottawa **38** 1924 pp. 141–145 171–175 map.

616.—Munro, J. A. Miscellaneous bird notes from southern Vancouver Island. Canad. Field-Nat. Ottawa **38** 1924 pp. 147–150 175–177.

617.—Murie, O. J. Nesting records of the Wandering Tattler and Surf-Bird in Alaska. Auk Lancaster Pa. **41** 1924 pp. 231–237 3 pls.

618.—Murphy, R. C. Birds collected during the Whitney South Sea Expedition. i. Amer. Mus. Nov. New York no. **115** 1924 pp. 1–11. ii ibid no. **124** pp. 1–13. iii ibid. no. **149** 1924 pp. 1–2.

619.—Murphy, R. C. The marine ornithology of the Cape Verde Islands, with a list of all the Birds of the Archipelago. Bul. Amer. Mus. N. H. New York **50** 1924 pp. 211–278 map 10 figs.

620.—Murr, F. Der Zwergfliegenschäpper *Erythrosterna parva parva* (Bechst.) bei Reichenhall und Berchtesgaden. Verh. Orn. Ges. Bayern München **16** 1924 pp. 49–50.

Murray, P. D. F. *vide* Huxley.

621.—Nagy, E. Die Vogelwelt der Puszta-Hortobágy in Ungarn. Die Bedeutung der Puszta-Hortobágy für den Vogelzug. Die hier durchziehenden Wildgänse. Aquila Budapest **30-31** 1924 pp. 272–288. [Magyar and German.]

622. –Nash, J. K. Observations on the Swift. Scot. Nat. Edinburgh **1924** pp. 77–83.

623.—Natorp, O. *Motacilla flava beema* Sykes auf Helgoland erbeutet. Orn. Monatsb. Berlin **32** 1924 pp. 125–126.

624.—Nauman, E. D. Screech Owl (*Otus asio asio*). Observations on some of its food habits. Wilson Bull. Oberlin **36** 1924 pp. 90–92.

625.—Naumburg, E. M. B. *Thraupis sayaca* and its allies. Auk Lancaster Pa. **41** 1924 pp. 105–116.

626.—Neff, J. A. Some Birds of the Ozark Region. Wilson Bul. Oberlin **35** 1923 pp. 202–215 map.

627.—Neubaur, F. Ornithologische Beobachtungen aus der Rheinprovinz. Journ. Ornith. Berlin **72** 1924 pp. 192–206.

628.—Neumann, O. Neue Unterarten von Neu-Guinea und Celebes. Orn. Monatsb. **32** 1924 pp. 38–40 [*Neopsittacus, Monacha, Eupetes*].

629.—Neunzig, R. *Ploceus nyasae* (Shelley) is das Weibchen von *Ploceus bertrandi* (Shelley). Einhalbseitenzwitterartig gefäarbter Weber. Orn. Monatsb. Berlin **32** 1924 pp. 143–144.

630.—Neunzig, R. Ueber die Gattung *Anaplectes*. Orn. Monatsb. Berlin **32** 1924 p. 177.

Neunzig, R. *vide* Stresemann.

631.—Nice, M. M. Extension of range of the Robin and Arkansas Kingbird in Oklahoma. Auk Lancaster Pa. **41** 1924 pp. 565–568.

632.—Nice, M. M. and L. B. The Birds of Oklahoma. Univ. Oklahoma Bul. Norman Okl. No. 20 1924 pp. 1–122 map 4 photos.

633.—Nicholls, B. A trip to Mungeranie, Central Australia. Emu Melbourne **24** 1924 pp. 45–59 4 photos.

634.—Nichols, J. T. Bird-Lore's twenty-fourth Christmas Bird Census Bird-Lore **26** 1924 pp. 14–52.

Nichols, J. T. *vide* Wheeler.

635.—Nonidez, J. F. Studies on the gonads of the Fowl. iv. The intertubular tissues of the testis in normal and hen-feathered cocks. Pp. 359–392 10 figs. v. The effect of ligation of the vas deferens on the structure of the testis, pp. 393–425 7 figs. Amer. J. Anat. Philadelphia **34** 1924.

Nonidez, J. F. *vide* Goodall.

636.—Nordmann, C. Sur le mécanisme du vol des oiseaux voiliers. C.R. Acad. Paris **178** 1924 p. 462.

North, J. D. *vide* Hankin.

637.—Oberholser, H. Ninth annual list of proposed changes in the A. O. U. "Check-List" of North American Birds. Auk Lancaster Pa. **41** 1924 pp. 590–595.

638.—Oberholser, H. C. Descriptions of new Treronidae and other non-Passerine Birds from the East Indies. J. Washington Acad. Sci. **14** 1924 pp. 294–303.

639.—Oberholser, H. C. Notes on the races of *Ramphalcyon capensis*. Proc. Biol. Soc. Washington **37** 1924 pp. 135–138.

640.—Oberholser, H. C. Notes on Birds collected by Dr. W. L. Abbott on the Karimata Islands, off West Borneo. Proc. U. S. Nat. Mus. Washington **64** art 22 1924 pp. 1–4.

641.—Oberholser, H. C. and **Chapman,** F. M. The migration of North American Birds. xxiv. The Humming birds, with notes on plumage. Bird-Lore Harrisburg Pa. **26** 1924 pp. 108–112 247–248 398–400 2 col. pl.

642.—Oldham, C. Ducks on the Tring reservoirs, pp. 302–321; also Wading Birds of the Tring reservoirs, pp. 341–352. Trans. Herts. Nat. Hist. Soc. St. Albans **17** 1923.

643.—Oldham, C. Birds observed in Hertfordshire in 1921. Trans. Herts. Nat. Hist. Soc. St. Albans **17** 1923 pp. 353–362.

644.—Olsen, R. J. Meddelelser om Danske Fugle. Dansk Orn. Tids. Kjøbenhavn **18** 1924 pp. 31–56.

645.—Olivo, O. Sull' inizio della capacità functionale dei tessuti contracttili nell' embrione di pollo, in relazione alla loro differenziazione strutturale e morphologica. I. Differeziazione funzionale e morphologica dell' abbozzo cardiaco. ii. Differenziazione funzionale e morphologica dei miotomi. Atti Acc. Lincei Roma **33** 2 sem. 1924 pp. 209–212 297–300 2 figs.

646.—Oomen, H. A. P. C. Ornithologiese Waarnemingen op Corsica. Ardea Leiden **13** 1924 pp. 69–86 map and 4 photos.

647.—Oomen, H. A. P. C. Een nieuwe Hollandse broedvogel: de Oeverloper (*Tringa hypoleucos* L.). Ardea Leiden **13** 1924 pp. 97–99 2 photos.

648.—Oordt, G. J. van. Ornithologische Waarnemingen in Nederland, 1908–23. Ardea Leiden **13** 1924 pp. 1–23.

649.—Oordt, G. J. van. Ornithologische Waarnemingen in Schotland en op de Farne Islands. Ardea Leiden **13** 1924 pp. 47–68 6 photos.

650.—Oordt, G. J. van. A "Pied Wagtail" breeding in the eastern part of Holland. Ardea Leiden **13** 1924 pp. 95–96.

651.—Osmaston, B. B. Nidification of *Pellorneum ruficeps jonesi.* J. Bombay N. H. Soc. **29** 1924 pp. 1053–1054.

652.—P.——, C. v. Herman Nyquist. Fauna och Flora Stockholm **1924** pp. 10–12.

653.—Paget-Wilkes, A. H. Notes on the Birds of the Grahamstown District, Cape Province, South Africa. Ibis London **1924** pp. 720–763 pls. xxvii–xxx.

654.—Paillerets, Comte de B. de. Catalogue des oiseaux de la Charente. Rev. Fr. d'Orn. Paris **16** 1924 pp. 289–294 307–311 358–363.

655.—Panisset L. et **Verge,** J. Diphtérie aviaire et epithelioma contagieux (Étude expérimentale). C.R. Acad. Sci. Paris **178** 1924 pp. 148–149.

656.—Panisset, L. et **Verge,** J. L'immunité dans la diphtérie aviaire et l'épithélioma contagieux des volailles. C.R. Acad. Sci. Paris **178** 1924 pp. 345–347.

Panzer, W. *vide* Banzhaf.

657.—Pardo, L. La *Oidemia fusca* (L.) en Valencia. Bol. Soc. Esp. Hist. Nat. Madrid **24** 1924 pp. 60–61.

Parsons, F. E. *vide* McGilp.

658.—Paulsson, G. Svankolonin i Landskrona hamn vintern 1924. Fauna och Flora Stockholm **1924** pp. 129–132 2 photos.

Payne, L. F. *vide* Hughes.

659.—Pearson, T. G. Notes on the winter Bird-life of southeastern Texas. Abs. Proc. Linn. Soc. New York Nos. **33–36** 1924 pp. 113–126.

660.—Pearson, T. G. Flamingoes in Cuba. Auk Lancaster Pa. **41** 1924 p. 599.

661.—Pearson, T. G. Herons of the United States. Bul. Nat. Assoc. Andubon Soc. New York No. **5** 1924 pp. 1–38 4 col. pls. and many photos.

662.—Pedersen, H. Mudderklire, *Actitis hypoleuca* som Dansk ynglefugl. Dansk Orn. Tids. Kjøbenhavn **18** 1924 pp. 107–112.

663.—Pedersen, H. Haettemaagens (*Larus ridibundus*) træk. With English summary. Dansk Orn. Tids. Kjøbenhavn **18** 1924 pp. 113–136 2 maps.

664.—Pellinkhof, J. H. Eenige waarnemingen betreffende het broeden van *Charadrius dubius curonicus* Gm. in Nederland. Ardea Leiden **13** 1924 pp. 92–94 5 photos.

665.—Penard, T. E. Historical sketch of the ornithology of Surinam. De West-Indische Gids The Hague **1924** pp. 145–168.

Penard, T. E. *vide* Bangs.

666.—Pesch, K. L. and **Schütt,** H. Eine Huhnertyphusepizootie. Centralbl. Bakt. Jena i Abt. **92** 1924 pp. 414–417.

667.—Peters, J. L. The type locality of *Alcedo cristata* Linné. Auk Lancaster Pa. **41** 1924 pp. 342–343.

Peters, J. L. *vide* Wetmore.

668.—Petit, L. L'arrivée des Hirondelles en 1924. Bul. Soc. Zool. Paris **49** 1924 pp. 296–297.

669.—Pézard, A. Les effets de la castration sur la plumage du Coq domestique (Remarques au sujet d'une note de J. **Benoit**). C.R. Soc. Biol. Paris **90** 1924 pp. 677–679.

670.—Pézard, A. and others. Modifications hormono-sexuelles chez les Gallinacés adult et théorie de la forme spécifique. C.R. Acad. Sci. Paris **178** 1924 pp. 2011–2013 2 figs.

671.—Pézard, A. Numerical law of regression of certain secondary sex characters. J. Gen. Physiol. New York **3** 1921 pp.271–283 9 figs.

672.—Pézard, A., **Sand,** K. et **Caridroit,** F. Le gynandromorphisme biparti expérimental, chez le Coq domestique. Récurrences raciales dictèes par la mue automnale et caractère transitoire de certaines modifications pigmentaires, C.R. Acad. sci. Paris **179** 1924 pp. 1087-1090.

673.—Pézard, A., **Sand,** K. et **Caridroit.** F. Modifications raciales par greffe ovarienne chez les Coqs. C.R. Soc. Biol. Paris **90** 1924 pp. 623–625.

674.—Pézard, A., **Sand,** K. et **Caridroit,** F. Pœcilandrie d'origine endocrinienne chez les Gallinacés. C.R. Soc. Biol. Paris **90** 1924 pp. 676–677.

675.—Pézard, A., **Sand,** K. et **Caridroit,** F. Potentialités homologues et potentialités hétérologues chez la Poule domestique. C.R. Soc. Biol. Paris **90** 1924 pp. 737–739.

676.—Pézard, A. et **Caridroit,** F. Remarques au sujet de l'hérédité sex-linked chez les Gallinacés. C.R. Soc. Biol. Paris **90** 1924 pp. 935–936.

677.—Pézard, A., **Sand,** K. et **Caridroit,** F. Survie d'un transplant testiculaire actif en présence d'un ovaire producteur d'oeufs mûrs chez la Poule domestique. C.R. Soc. Biol. Paris **90** 1924 pp. 1459–1460 see also pp. 1075–1076 1146–1148.

Pézard, A. *vide* Athanasiu.

Phillips, B. I. *vide* Yocom.

678.—Phillips, J. C. A natural history of the Ducks. Vol. ii. The genus *Anas*. Pp. xii + 409 26 pls. 38 maps London (Longmans) 1924 4to.

679.—Pindar, L. O. Winter Birds in eastern Arkansas. Wilson Bull. Oberlin **36** 1924 pp. 201–205.

680.—Pittman, H. H. The Black-billed Cuckoo in Manitoba. Canad. Field Nat. Ottawa **38** 1924 pp. 64–65 2 photos.

681.—Plimmer, R. H. A. and **Lowndes,** J. The changes in the lime content of the hen's egg during development. Biochem. J. Cambridge **18** 1924 pp. 1163–1169.

682.—Poncy, R. Contenus stomacaux d'Echassiers et de Palmipèdes. Bul. Soc. Zool. Genève **3** fasc. 3 1924 pp. 21–28.

683.—Poncy, R. Apropos d'un passage de Flammants roses (*Phoenicopterus roseus*) Pallas à Genève. Extr. La Diana 1924.

684.—Portal, M. Breeding habits of the Red-legged Partridge. Brit. Bds. London **17** 1924 pp. 315–316.

685.—Prado, V. "El *Gallus inauris*" (Castelló). Jiucio critico. An. Zool. Aplic. Santiago **9** 1922 pp. 7–26.

686.—Preece, W. H. A. The concentration of migratory birds at Sault Ste. Marie, Ontario, in the spring. Canad. Field-Nat. Ottawa **38** 1924 pp. 9–10.

687.—Prill, A. G. Nesting birds of Lake County, Oregon [Additions and Corrections]. Wilson Bull. Oberlin **36** 1924 pp. 24–25.

688.—Pugliese, A. et **Locatelli,** E. Nuovi contributi allo studio del problema delle vitamine. Rend. Ist. lomb. Milano **56** 1923 pp. 317–336 5 figs.

689.—Ralfe, P. G. Supplementary notes to "The Birds of the Isle of Man," July, 1923. Pp. 1–40 12 photos. Edinburgh (Douglas and Foulis) 1924 8vo.

690.—Ralfe, P. G. Manx ornithological notes, 1923. Brit. Bds. London **17** 1924 pp. 229–230.

691.—Randoin, L. et **Simonnet,** H. Sur l'équilibre alimentaire. Entretien du Pigeon au moyer d'un régime totalement privé de facteur hydrosoluble B. C.R. Acad. Sci. Paris **179** 1924 pp. 700–706.

692.—**Rattray,** R. H. Notes on some Indian Cuckoos and their habits. Proc. S. Lond. Ent. Nat. Hist. Soc. for **1923-24** 1924 pp. 12–22.

693.—**Raw,** W. Latitude and its effect upon size of clutch and spring migration. Vasculum Hexham **10** 1924 pp. 42–43 88–90 114.

694.—**Reboussin,** R. Nid aerien de Mésange Huppée (*Parus cristatus*]. Rev. Fr. d'Orn Paris **16** 1924 pp. 426–428.

695.—**Reed,** C. S. Las aves de caze de la provincia de Mendoza. Rev. Chilena Santiago **25** 1923 pp. 203–220 7 figs.

696.—**Reed,** C. S. Breves notas biologicas referentes a las aves Chilenas. Rev. Chilena Santiago **27** 1924 pp. 145–146.

Reinhardt, H. *vide* Eckhardt.

Reiser, O. *vide* Michel.

697.—**Rendahl,** H. Embryologische und morphologische Studien über des Zwischenhirn beim Huhn. Act. Zool. Stockholm **5** 1924 pp. 241–344 76 figs.

698.—**Renouf,** L. P. W. Spoonbill and Great Spotted Cuckoo in Co. Kerry. Irish Nat. Dublin **33** 1924 pp. 30–31.

699.—**Rensch,** B. Zur Entstehung der Mimikry der Kuckuckseier. Experimentelle Untersuchungen. Journ. Ornith. Berlin **72** 1924 pp. 461–472.

700.—**Rensch,** B. Das Dépérétsche Gesetz und die Regel von der Kleinheit der Inselformen als Spezielfall des Bergmannscher Gesetzes und ein Erklärung desselben. Zs. indukt. Abstammgslehre Leipzig **35** 1924 pp. 139–155.

Rensch, B. *vide* Görnitz.

Rensch, B. *vide* Jacobi.

701.—**Rényi,** G. S. Studies on pigment genesis. i. The natrue of the so-called "pigment-bildner." J. Morph. Philadelphia **39** 1924 pp. 415–433 1 pl.

702.—**Révész,** G. Tierpsychologische Untersuchungen. Vorsuche an Hühnern. Zs. Psychol. Leipzig **88** 1922 pp. 130–137.

703.—**Rex,** H. Ueber das Splanchnocoel des Vorderkopfes der Vögel. Ein Beitrag zur Entwicklungsgeschichte des M. obliquus superior. Zs. ges. Anat. München 1 Abt. **70** 1924 pp. 512–597 2 pls 60 textfigs.

Ribeiro, A. de M. *vide* Miranda-Ribeiro.

704.—**Richards,** E. B. A list of the land birds of the Grass Valley district, California. Condor Berkeley Cal. **26** 1924 pp. 98–104.

705.—**Richmond,** C. W. and **Bradshaw,** H. S. Descriptions of three new Birds from Gonave Island, Haiti. [*Saurothera, Calyptophilus, Phaenicophilus*]. Proc. Biol. Soc. Washington **37** 1924 pp. 105–108.

706.—**Riddle,** O. and others. Studies in the physiology of reproduction in birds. xvi. The normal blood sugar of pigeons and its relation to age, sex, species and certain diseases, pp. 317–332. xvii. Blood sugar and ovulation under inactivity or close confinement, pp. 333–336. xviii. Effects of the onset of cold weather on blood sugar and the ovulation rate in Pigeons, pp. 337–345. Amer. J. Physiol. Baltimore **67** 1924 xix. A hitherto unknown function of the thymus ibid. **68** 1924 pp. 557–580.

707.—**Riddle,** O. A case of complete sex-reversal in the adult Pigeon. Amer. Nat. New York **58** 1924 pp. 167–181.

708.—**Riddle,** O. On the necessary gaseous environment of the Bird Embryo. Ecology Brooklyn **5** 1924 pp. 348–362.

709.—**Riddle,** O. Sex in the right and left sides of the Bird's body. Proc. Amer. Philos. Soc. Philadelphia **63** 1924 pp. 152–161.

Riddle, O. *vide* Bartilmez.

710.—**Riekel,** A. Psychologische Untersuchungen an Hühnern. Zs. Psychol. Leipzig **89** 1922 pp. 81–115.

711.—**Riera,** E. Nota sugli uccelli osservati nella provincia di Siracusa. Riv. Ital. Orn. Messina **7** 1923 pp. 8–17.

712.—**Riley,** J. H. A new Bush-Warbler from the French Congo. Auk Lancaster Pa. **41** 1924 pp. 326–327.

713.—**Riley,** J. H. A new Spotted Babbler from Siam. Proc. Biol. Soc. Washington **37** 1924 pp. 129–130.

714.—Rintoul, L. J. and **Baxter,** E. V. Report on Scottish Ornithology in 1923. Scot. Nat. Edinburgh **1924** pp. 105–120 137–161.

Rintoul, L. J. *vide* Baxter.

715.—Ritchie, J. Swallow's nest on branch of tree. Scot. Nat. Edinburgh **1924** pp. 83–84 fig.

Ritchie, M. *vide* Duerden.

716.—Riviere, B. B. Ornithological notes from Norfolk. Brit. Bds. London **17** 1924 pp. 254–273.

717.—Riviere, B. B. Demoiselle Crane in Norfolk. Brit. Bds. London **18** 1924 pp. 83–84.

718.—R[iviere], B. B. Obituary. The Rev. Maurice C. B. Bird. Brit. Bds. London **18** 1924 pp. 196–197.

719.—Riviere, B. B. Wildfowl in Norfolk in the winter, 1923–24. Woodcock in Norfolk in the winter, 1923–24. Trans. Norfolk Nat. Hist. Soc. Norwich **11** 1924 pp. 544–550.

Riviere, B. B. *vide* Long.

720.—Roberts A. Classification of S. African Birds: Some additional notes. Ann. Transvaal Mus. Pretoria **10** 1924 pp. 77–86.

721.—Roberts, A. Synoptic Check-List of the Birds of South Africa. Ann. Transvaal Mus. Pretoria **10** 1924 pp. 89–195 4 pls.

722.—Roberts, A. The protection of birds in South Africa. S. Afr. J. Nat. Hist. Pretoria **4** 1924 pp. 317–333.

723.—Roberts, A. Red Phalarope (*Phalaropus fulicarius*) in Africa. Auk Lancaster Pa. **41** 1924 pp. 600–601.

724.—Roberts, C. C. On the nesting of some Nyasaland Ducks. Ibis London **1924** pp. 356–360.

725.—Roberts, C. C. Notes on Nyasaland Birds and their nests and eggs. Ibis London **1924** pp. 764–771.

726.—Robinson, H. C. and **Kloss,** C. B. On a large collection of birds chiefly from West Sumatra, made by Mr. E. Jacobson. With notes by the collector. J. Fed. Malay States Museums Kuala Lumpur **11** 1924 pp. 189–347 6 col. pls. 3 maps.

727.—Robinson, H. C. and **Kloss,** C. B. A nominal list of the Birds collected in Java. Treubia Batavia **5** 1924 pp. 267–298.

728.—Robinson, S. M. Nesting of *Æthopyga gouldiae* and *Æ. sanguinipecta.* J. Bombay N. H. Soc. **29** 1924 pp. 1052–1053.

729.—Roblen, P. Beobachtungen an *Porzana parva* in Pommern. Orn. Monatsb. Berlin **32** 1924 pp. 1–4.

730.—Roboussin, R. Amours d'Engoulevants. Rev. Fr. d'Orn. Paris **16** 1924 pp. 486–488.

731.—Rochon-Duvigneaud, A. Lignes visuelles des foveae centrales (à vision indépendante) et des foveae latérales (à vision associée) chez le Faucon crécerelle. C.R. Acad. Sci. Paris **178** 1924 pp. 2272–2274 2 figs.

732.—Rosenberg, E. Ornithologiska anteckningar från år 1924. Fauna och Flora Stockholm **1924** pp. 241–246.

733.—Ross, R. C. Occurrence and behaviour of certain shore birds in southern California. Condor Berkeley Cal. **26** 1924 pp. 90–92.

734.—Rossem, A. .J van. A survey of the Song Sparrows of the Santa Barbara Islands. Condor Berkeley Cal. **26** 1924 pp. 217–220 2 figs.

Rossem, A. J. van *vide* Dickey.

735.—Rothschild, Lord. Notes on *Lophoceros jacksoni* Grant and L. *deckeni* (Cab.). Ann. Mag. N. H. London (9) **14** 1924 p. 317.

736.—Rothschild, Lord. Note on a British-killed specimen of *Cursorius cursor.* Bul. Bt. Orn. Cl. London **44** 1924 p. 93.

737.—Rothschild, Lord. *Centropus violaceus* in New Ireland. Bul. Bt. Orn. Cl. **45** 1924 p. 9.

738.—Rothschild, Lord and **Hartert,** E. New birds from St. Matthias I. nr. New Guinea [*Micropsitta, Pachycephala, Lalage, Rhipidura, Phylloscopus, Turdus*]. Bul. Bt. Orn. Cl. London **44** 1924 pp. 50–53.

739.—Rothschild, Lord and **Hartert,** E. New species of *Domicella* and *Philemon* from New Ireland. Bul. Bt. Orn. Cl. **45** 1924 pp. 7–9.

740.—Rowan, W. A practical method of recording Bird-calls. Brit. Bds. London **18** 1924 pp. 14–18.

741.—Rowswell, B. T. Report of the Ornithological Section, 1923. Rep. Trans. Soc. Guernsey for **1923** pp. 188–193.

742.—Royds, T. F. The Birds of Haughton. Trans. N. Staffs. F. Cl. Stafford **58** 1924 pp. 73–78.

743.—Ruttledge, R. F. Corrigeendauw: A haunt of the Lesser Black-backed Gull. Irish Nat. Dublin **33** 1924 pp. 116–118.

744.—Saceghem, R. van. Note sur les Pique-Boeufs du Congo Belge [*Buphagus*]. Rev. Zool. Afric. Tervueren **12** 1924 pp. 100–102.

745.—Saito, G. Birds from Unenomura, Isumigun, Prefecture Chiba. Tori Tokyo **4** No. 18 1924 pp. 205–217 [in Japanese].

Salmon, H. M. *vide* Acland.

Salmon, H. M. *vide* Ingram.

Sand, K. *vide* Pézard.

746.—Sassi, M. Beitrag zur Ornis Zentralafrikas. iii Teil. Ann. naturhist. Mus. Wien **38** 1924 pp. 20–81 map.

747.—Saunders, A. A. Recognising individual birds by song. Auk Lancaster Pa. **41** 1924 pp. 242–259.

748.—Saunders, A. A. The study of Bird sounds. Condor Berkeley Cal. **26** 1924 pp. 209–213.

749.—Saunders, W. E. Whistling Swans in Ontario. Canad. Field-Nat. **38** 1924 pp. 26–27.

750.—Saunders, W. E. New records for Point Pelee. Canad. Field-Nat. **38** 1924 pp. 36–37.

751.—Sawahara, I. On the breeding habits of the Indian Broadbills at Kiso, Hondo. Tori Tokyo **4** No. 16-17 1924 pp. 92–99 1 fig. [Japanese].

752.—Sayle, M. Viability of Seeds passing through the alimentary canals of Pigeons. Auk Lancaster Pa. **41** 1924 pp. 474–475.

753.—Scharleman, N. Ornithologische Arbeit in der Ukraine während der letzten Jahre. Journ. Ornith. Berlin **72** 1924 pp. 552–555.

754.—Scheel, H. Nathejre, *Nycticorax n. nycticorax*. Dansk. Orn. Tids. Kjøbenhavn **18** 1924 pp. 18–22 2 figs.

755.—Schenk, J. Aves: in Fauna Regni Hungariae ed. R. Soc. Sci. Nat. Hung. pp. 1–112 l. 8vo. [Magyar and Latin.]

756.—Schenk, J. Der Zug der Waldschnepfe in Europa. Aquila Budapest **30-31** 1924 pp. 26–135 26 figs. [Magyar and German.]

757.—Schenk, J. Bericht über die ungarischen Vogelberingungen im Jahre 1923. Aquila Budapest **30-31** 1924 pp. 145–176 [Magyar and German.]

758.—Schiermann, G. *Locustella luscinioides* im Kremmer Luch bei Berlin. Journ. Orn. Berlin **72** 1924 pp. 1–4.

759.—Schiermann, G. *Locustella fluviatilis* im Unterspreewald. Orn. Monatsb. Berlin **32** 1924 p. 173.

760.—Schiøler, E. L. Herluf Winge. With bibliography. Dansk. Orn. Tids. **18** 1924 pp. 1–4 portr.

761.—Schiøler, E. L. Om de skandinaviske Ænder, deres dragtskifte og træk. [The Scandinavian Ducks, their plumage changes and migrations.] Dansk. Orn. Tids. Kjøbenhavn **18** 1924 pp. 85–95.

762.—Schjelderup-Ebbe, T. Egg og verpeevne hos *Gallus domesticus*. Nyt Mag. Naturw. Kristiania **61** 1924 pp. 181–221.

763.—Schjelderup-Ebbe, T. Weitere Beiträge zur Sozial- und Individualpsychologie des Haushuhns. Zs. Psychol. Leipzig **92** 1923 pp. 60–87.

764.—Schjelderup-Ebbe, T. Zur Sozialpsychologie der Vögel. Zs. Psychol. Leipzig **95** 1924 pp. 36–84.

765.—Schlosser, M. Tertiary Vertebrates from Mongolia. Palaeont. Sinica Peking ser. C. **1** 1924 pp. 1–119 6 pls. [Aves pp. 94–95.]

766.—Schmidt, F. Vergleichend-anatomische und histologische Untersuchungen über Bürzeldrüse der Vögel. Jenaische Zs. Natw. **60** 1924 pp. 1–44 5 pls.

767.—Schneider, M. and **Dunn,** L. C. On the length and variability of the bones of the White Leghorn Fowl. Anat. Rec. Philadelphia **27** 1924 pp. 229–239.

768.—Schnurre, O. *Ixobrychus minutus* (L.) als Parkvogel. Journ. Orn. Berlin **72** 1924 pp. 5–10.

769.—Scholey, G. J. Does the Cuckoo know its own egg ? Ool. Rec. London **4** No. 1 1924 pp. 9–11.

770.—Schouteden, H. Un Serpentaire (Oiseau) du Katanga. Bul. Cercl. Zool. Cong. i 1924 p. 12 [in Rev. Zool. Afr.].

771.—Schouteden, H. Un nouvel exemplaire du *Pseudochelidon* (Oiseau). Bul. Cercle Zool. Congol. i 1924 p. 33 [in Rev. Zool. Afr.].

772.—Schouteden, H. Mes récoltes ornithologiques à Kisantu, Léopoldville et Kidada. Rev. Zool. Afric. Tervueren **12** 1924 pp 258–277.

773.—Schouteden, H. Mes récoltes ornithologiques à l'Equateur (Eala, Ikengo, et le lac Tumba). Rev. Zool. Afr. Tervueren **12** 1924 pp. 405–425.

Schulgina, O. *vide* Ebert.

774.—Schuster, L. Oologische Beobachtungen in der Mark Brandenburg im Jahre 1922. Journ. Orn. Berlin **72** 1924 pp. 170–178.

775.—Schuster, L. Beitrag zur Vogelwelt von Bad Nauheim und der Wetterau. Verh. Orn. Ges. Bayern München **16** 1924 pp. 56–76.

Schuster, L. *vide* Eckardt.

Schütt, H. *vide* Pesch.

776.—Sciacchitano, I. Note di ornitologia Sarda. Atti soc. ital. sci. nat. Milano **63** 1924 pp. 234–238.

777.—Sciacchitano, I. L'alimentazione dei Passeri in rapporto con l'agricoltura. Riv. Ital. Orn. **7** 1923 pp. 1–7.

778.—Sclater, W. L. Systema Avium Ethiopicarum. A systematic list of the Birds of the Ethiopian Region. Pt. 1 1924 pp. 1–304 London (Bt. Orn. Union) 1924 8vo.

779.—Sclater, W. L. Notes on African Birds—*Artamella* gen. n., *Phedina, Sigmodus.* Bul. Bt. Orn. Cl. London **44** 1924 pp. 90–93.

780.—Sclater, W. L. Review of the races of *Onychognathus morio.* Bul. Bt. Orn. Cl. London **45** 1924 pp. 5–7 5 figs.

781.—Sclater, W. L. Note on *Oreomyias riisi* and the genus *Pedilorhynchus.* Bul. Bt. Orn. Cl. London **45** 1924 pp. 44–46.

782.—[Sclater, W. L.] Obituary. Count Tommaso Salvadori. Ibis London **1924** pp. 159–161 pl. xi.

783.—[Sclater, W. L.] Obituary. Nathaniel Charles Rothschild. Ibis London **1924** pp. 161–162.

784.—[Sclater, W. L.] Obituaries. Henry Haversham Godwin-Austen (pl. xii portrait); Charles Swinhoe, Adolf Herluf Winge, W. H. Dudley Le Souëf. Ibis London **1924** pp. 360–365.

785.—[Sclater, W. L.] Obituary. William Robert Ogilvie-Grant. Ibis London **1924** pp. 774–780 portr. and bibliography by T. **Wells.**

786.—[Sclater, W. L.] Obituaries. Charles Chubb, Edward Jonas Brook, Viktor Ritter von Tschusi zu Schmidhoffen, Dean Conant Worcester. Ibis London **1924** pp. 780–785.

787.—Scott, H. H. A note on the King Island Emu. Papers Proc. R. Soc. Tasmania Hobart for **1923** 1924 pp. 103-107.

Scott, H. H. *vide* Lord.

788.—Sechi, E. Sul trapianto del testicolo. Riv. Biol. Roma **5** 1923 pp. 329–346 1 pl.

789.—Seth - Smith, D. On colour variation in the Budgerigar. Bul. Bt. Orn. Cl. London **44** 1924 pp. 83–84.

790.—Shankland, F. N. A haunt of the Great Horned Owl. Wilson Bull. Oberlin **36** 1924 pp. 117–120.

791.—Sharland, M. S. R. Notes on the early nesting and range of birds near Hobart. Emu Melbourne **23** 1924 pp. 194–197 2 pls. (photos).

792.—Shearer, C. On the oxygen consumption rate of parts of the Chick embryo and fragments of the Earthworm Proc. R. Soc. London **B 96** 1924 pp. 146–156.

793.—Sherman, A. R. "Animal Aggregations": a reply. Condor Berkeley Cal. **26** 1924 pp. 85–88.

794.—Shiwago, P. J. The chromosome complexes in the somatic cells of male and female of the domestic chicken. Science New York **60** 1924 pp. 45–46 2 figs.

795.—Shore-Baily, W. The breeding of the Olivaceous Thrush (*Turdus olivaceus*), pp. 255–256; of the Yellow Whydah (*Penthebriopsis macrura*), pp. 256–257. Avicult. Mag. London (4) **2** 1924 photos.

796.—Shore-Bailey W. Le nidification de la Poule d'eau à poitrine blanche (*Amaurornis phoenicura*). Oiseau Paris **5** 1924 pp. 161–164.

797.—Sillem, J. G. Eenige aanteekeningen betreffende de avifauna van Spanje. Jaarb. Club Nederl. Vogelk. Zevenbergen **14** 1924 pp. 22–29.

Simmonet, H. *vide* Randoin.

798.—Sinclair, W. J. The faunas of the concretionary zones of the Oreodon beds, White River Oligocene. Proc. Amer. Phil. Soc. Philadelphia **63** 1924 pp. 94–133 1 pl.

799.—Skinner, K. L. Notes on eggs from Minas Geraes, Brazil. Ool. Rec. London **4** No. 1 1924 pp. 11–20.

800.—Sladden, B. Karewa: an island sanctuary. N. Zeal. J. Sci. Tech. Wellington **7** 1924 pp. 182–187 2 photos.

801.—Smith, T. Moorland Bird migration. Trans. N. Staff. F. Cl. Stafford **58** 1924 pp. 42–55.

802.—Snapp, C. F. A comparative study of the blood supply of the labyrinth in Birds. Anat. Rec. Philadelphia **27** 1924 pp. 29–45 3 pls.

803.—Snethlage, E. Informações sobre a avifauna maranhense. Bol. Mus. Nac. Rio de Janeiro **1** 1924 pp. 219–223.

804.—Snethlage, E. Neue Vogelarten aus Nord-Ost-Brasilien. Journ. Ornith. Berlin **72** 1924 pp. 446–450. [*Sclerurus, Grallaria, Picumnus*].

805.—Snouckaert van Schauburg, R. Baron. Waarnemingen aan de Fransche Riviera. Jaarb. Club Nederl. Vogelk. Zevenbergen **14** 1924 pp. 57–78.

806.—Snouckaert van Schauburg, R. Baron. Ornithologie van Nederland. Waarneningen van 1 October 1923 tot en met 30 September 1924. Jaarb. Club Nederl. Vogelk. Zevenbergen **14** 1924 pp. 120–123.

807.—Sodhi, H. S. Birds of the Karachi coast. Proc. Lahore Phil. Soc. **3** 1924 pp. 88–90.

808.—Someren, V. G. L. van. Description of a new subspecies of *Cosmopsarus*. Bul. Bt. Orn. Cl. London **44** 1924 pp. 70–71.

809.—Spanner, R. Der Pfortaderkreislauf in der Vogelniere. Verh. Anat. Ges. in Anat. Anz. Jena **58** 1924 pp. 23–29 2 figs.

810.—Spennemann, W. B. Biologische Notizen über einige javanische Vögel. Treubia Batavia **6** 1924 pp. 12–19.

811.—Sprunt, A. Breeding of MacGillivray's Seaside Sparrow in South Carolina. Auk Lancaster Pa. **41** 1924 pp. 482–484.

812.—Sprunt, A. Notes on the breeding of the Carolina Junco (*Junco hyemalis carolinensis*) in the mountains of North Carolina. Auk Lancaster Pa. **41** 1924 pp. 610–612.

813.—Stefani, T. de. Cattura di uccelli rari in Sicilia. Bul. Inst. Zool. Univ. Palermo **1** No. 9-10 1923 pp. 23–24.

814.—Stehlin, H. G. Die oberpliocaene Fauna von Senèze (Haute-Loire). Eclogae Geol. Helvet. Bâle **18** 1923 pp. 268–281 [Birds 278–280].

815.—Stendall, J. A. S. A ringed Woodcock. Irish Nat. Dublin **33** 1924 p. 24; also W. H. **Workman** pp. 44–45.

816.—Stenhouse, J. H. Notes on rare land birds from Tristan d'Acunha in the Royal Scotch Museum. Scot. Nat. Edinburgh **1924** pp. 93–96.

817.—Stevens, H. Notes on the Birds of the Sikkim Himalayas. Pt. iii. J. Bombay N. H. Soc. **29** 1924 pp. 1007–1030 4 photos; **30** 1924 pp. 54–71 2 photos.

818.—Stewart, W. Roosting habits of Lanarkshire Rooks. Scot. Nat. Edinburgh **1924** pp. 69–74.

819.—Stieve, H. Beobachtungen über den rechten Eierstock und den rechten Legdarm des Huhnerhabichts (*Falco palumbarius* Kl.) und einiger anderer Raubvögel. Morph. Jahrb. Leipzig **54** 1924 p. 137–156.

820.—**Stieve,** H. Die Eierstöcke und der Legedarm bein Huhnerhabicht (*Falco palumbarius*) und Sperber (*Accipiter nisus*). Verh. D. Zool. Ges. Berlin **29** 1924 pp. 76–78.

821.—**Stone,** W. The ornithology of today and tomorrow. An address delivered before the Nuttall Ornithological Club upon its fiftieth anniversary. Reprint from The Fiftieth Ann. Nuttall Orn. Club 1924 pp. 7–25.

822.—**Stoner,** D. Ornithological impressions of Fiji and New Zealand. Wilson Bull. Oberlin **36** 1924 pp. 20–22.

Storer, T. I. *vide* Grinnell.

823.—**Stresemann,** E. Scientific nomenclature. Auk Lancaster Pa **41** 1924 pp. 507–512.

824.—**Stresemann,** E. Nomenclatorial remarks on Sumatran Birds. J. Fed. Malay States Mus. **11** 1924 p. 349.

825.—**Stresemann,** E. Mutationsstudien. VI.—*Cuculus clamosus* Latham pp. 73–77. VII.—*Cacomantis infuscatus* (Hartlaub) pp. 77–79. VIII.—*Clamator serratus* (Sparman) pp. 79–83. IX.—*Accipiter hilgerti* pp. 83–85. X.—*Malaconotus gladiator* pp. 85–87. XI.—*Chlorophoneus nigrithorax* (Sharpe) pp. 87–89. XII.—*Copsychus amoenus* pp. 252–255. XIII.—*Trochocercus bedfordi*. XIV.—*Eremophila berlepschi* p. 260–262. XV.—*Phyllastrephus clamans* pp. 421–422. XVI.—*Melanerpes rubrifrons* pp. 422–423. XVII.—*Scoptelus brunneiceps* pp. 423–424. XIX.—*Accipiter ventralis* pp. 542–545. XX.—*Oenanthe monticola* pp. 545–546. XXI.—*Poëphila mirabilis* pp. 547–552. J, Orn. Berlin **12** 1924.

826.—**Stresemann,** E. Einiges über die afrikanischen *Terpsiphone*-Arten. Journ. Orn. Berlin **72** 1924 pp. 89–96.

827.—**Stresemann,** E. Gibt es zwei *Podica*-Arten ? Journ. Orn. Berlin **72** 1924 pp. 96–98.

828.—**Stresemann,** E. Der Formenkreis der Rohrweihe *Circus aeruginosus* Journ. Ornith. Berlin **72** 1924 pp. 262–269.

829.—**Stresemann.** Neue Beiträge zur Ornithologie Deutsch-Neuguineas. Journ. Ornith. Berlin **72** 1924 pp. 424–428.

830.—**Stresemann,** E. Raubvogelstudien. Journ. Ornith. Berlin **72** 1924 pp. 429–446.

831.—**Stresemann,** E. Der Formenkreis *Pachycephala rufiventris*. Journ. Ornith. Berlin **72** 1924 pp. 540–542.

832.—**Stresemann,** E. Über *Hieraaëtus ayresii* und *Spizaëtus africanus*. Nov. Zool. Tring **31** 1924 pp. 214–216.

833.—**Stresemann,** E. Ueber *Accipiter castanilius* Bonaparte. Orn. Monatsb. Berlin **32** 1924 pp. 6–7.

834.—**Stresemann,** E. Die Formenkreise *Phylloscopus trochiloides* und *Ph. davisoni*. Orn. Monatsb. Berlin **32** 1924 pp. 8–10.

835.—**Stresemann,** E. Die Anpassung von Kuckuckseiern an *Emberiza*-Eier in Japan. Orn. Monatsb. Berlin **32** 1924 pp. 16 17.

836.—**Stresemann,** E. Was ist *Phylloscopus inornatus* (Blyth) ? Orn. Monatsb. Berlin **32** 1924 pp. 17–18.

837.—**Stresemann,** E. *Terpsiphone mutata voeltzkowiana* subsp. n. Orn. Monatsb. Berlin **32** 1924 p. 18.

838.—**Stresemann,** E. Ueber den Gefiederwechsel einiger *Emberiza*-Arten. Orn. Monatsb. Berlin **32** 1924 pp. 42–43.

839.—**Stresemann,** E. Eine *Amazona farinosa* (Boddaert) mit roter Schwanzbasis. Orn. Monatsb. Berlin **32** 1924 pp. 43–44.

840.—**Stresemann,** E. *Dryoscopus thamnophilus* Cab. ein Artifakt. Orn. Monatsb. Berlin **32** 1924 pp. 47–48.

841.—**Stresemann,** E. Neue Raubvogelformen. Orn. Monatsb. Berlin **32** 1924 p. 48.

842.—**Stresemann,** E. *Oceanodroma hornbyi* (Gray) aus einem chilenischen Salpeterfelder. Orn. Monatsb. Berlin **32** 1924 pp. 61–63.

843.—**Stresemann,** E. *Puffinus griseus* (Gmelin) Brutvogel in der nordchilenischen Pampa. Orn. Monatsb. Berlin **32** 1924 pp. 63–64.

844.—Stresemann, E. *Luscinia brunnea dendrobiastes* subsp. n. Orn. Monatsb. Berlin **32** 1924 p. 81.

845.—Stresemann, E. *Acrocephalus scirpaceus fuscus* (Ehrenberg) vs. *A. s. macronyx* Severzov. Orn. Monatsb. Berlin **32** 1924 pp. 85–86.

846.—Stresemann, E. Das geographische Variieren von *Accipiter melanoleucus* A. Smith. Orn. Monatsb. Berlin **32** 1924 pp. 86–87.

847.—Stresemann, E. Zur Geschichte des Haushuhns. Orn. Monatsb. Berlin **32** 1924 pp. 105–106.

848.—Stresemann, E. *Hieraaëtus kieneri formosus* subsp. n.; *Accipiter minullus sassii* subsp. n. Orn. Monatsb. Berlin **34** 1924 pp. 108–109.

849.—Stresemann, E. Die Gattung *Strix* im Malayischen Archipel. Orn. Monatsb. Berlin **32** 1924 pp. 110–111.

850.—Stresemann, E. Schizochroismus beim Stieglitz. Orn. Monatsb. Berlin **34** 1924 pp. 114–115; also pp. 172–173.

851.—Stresemann, E. Nordische Hühnerhabichte in Deutschland. Orn. Monatsb. Berlin **32** 1924 pp. 128–132.

852.—Stresemann, E. Das Bergrebhuhn, *Perdix montana* Gmelin. [Mutationsstudien XVIII]. Orn. Monatsb. Berlin **32** 1924 pp. 132–135.

853.—Stresemann, E. Die afrikanischen *Circaëtus*-Arten. Orn. Monatsb. Berlin **32** 1924 pp. 165–166.

854.—Stresemann, E. Die Gattung *Acrocephalus* im indo-australischen Archipel. Orn. Monatsb. Berlin **32** 1924 pp. 167–168.

855.—Stresemann, E. Zur Einführung des Ringfasans. Orn. Monatsb. Berlin **32** 1924 pp. 168–170.

856.—Stresemann, E. *Lamprocolius chloropterus elisabeth* subsp. n. Orn. Monatsb. Berlin **32** 1924 p. 173.

857.—Stresemann, E. Albinotische Möven. Orn. Monatsb. Berlin **32** 1924 pp. 176–177.

858.—Stresemann, E. Ueber *Centropus fischeri* Reichenow. Verh. Orn. Ges. Bayern München **16** 1924 pp. 54–55.

859.—Stresemann, E. und **Neunzig,** R. Die systematische Stellung des *Ploceus brachypterus* Swainson. Journ. Ornith. Berlin **72** 1924 pp. 537–540.

Stresemann, E. *vide* Jacobi.

860.—Stubbs, F. J. The night cry of the Redwing. Essex Nat. Stratford **20** 1924 pp. 251–259.

861.—Sushkin, P. P. Note on *Falco altaicus*. Bul. Bt. Orn. Cl. London **45** 1924 p. 18.

862.—Sushkin, P. P. Notes on the morphology and classification of the Fringillidae and allied groups. Bul. Bt. Orn. Cl. London **45** 1924 pp. 36–39 3 figs.

863.—Sushkin, P. P. Notes on some eggs from Mongolia. Bul. Bt. Orn. Cl. London **45** 1924 pp. 39–40.

864.—Sutton, J. An ornithological trip around Eyre Peninsula. S. Austr. Orn. Adelaide **7** 1924 pp. 118–159 map.

865.—Sutton, G. M. Notes on the nesting of the Wilson's Snipe in Crawford County, Pennsylvania. Wilson Bul. Oberlin **35** 1923 pp. 191–202 3 figs

866.—Swaen, A. E. H. and others. Woodpeckers and Pine-cones. Bt. Bds. London **17** 1924 pp. 276–280 fig.

867.—Swann, H. K. A monograph of the Birds of Prey (Order Accipitres). Pt. I pp. i-ix + 1–52 5 pls. London (Wheldon & Wesley) 4to.

868.—Swann, H. K. On the Irish Sparrowhawk. Bul. Bt. Orn. Cl. London **44** 1924 pp. 78–79; see also D. A. **Bannerman** & H. F. **Witherby** and others pp. 93–98.

869.—Swarth, H. S. Fall migration notes from the San Francisco Mountain region, Arizona. Condor Berkeley Cal. **26** 1924 pp. 183–190 2 photos.

870.—Swarth, H. S. Birds and Mammals of the Skeena river region of northern British Columbia. Univ. Cal. Publ. Zool. Berkeley **24** 1924 pp. 315–394 3 pls. 1 text-fig.

Swarth, H. S. *vide* Griscom.

871.—Symons, R. E. The nesting of the Green Ibis *Theristicus hagedash* in South Africa. Comp. Ool. Santa Barbara Cal. **1** 1924 pp. 10–13 3 photos.

872.—Symons, R. E. A visit to Dyer's Island, Cape Prov. S. Afric. J. Nat. Hist. Pretoria **4** 1924 p. 253–259.

873.—Szeliga-Mierzeyewski, W. v. Die Vögel der Insel Oesel (Estland). Arch. Natg. Berlin **89** Abt. A. Hft. 11 1924 pp. 218–237.

874.—Szemere, L. Einiges über die Stimmen der Kohlmeise, des Feldsperlinges und des Wendehalses. Aquila Budapest **30-31** 1924 pp. 288–292. [Magyar and German].

875.—Szielasko, A. Das Brutgeschäft von *Pygoscelis papua* (Forst.) auf Süd-Georgien im südlichen Eismeer. Beitr. Fortppl.-biol. Vög. Berlin **1** 1924 pp. 7–9 26–29.

876.—Sztolcman, J. Le phoenicoptère en Pologne. Prace Zool. Muz. Przyro Warszawa. **2** 1924 pp. 41–42. [Polish with French rés.]

877.—Tait, W. C. The Birds of Portugal. Pp. xii + 260 10 pls. map. London (Witherby) 1924 8vo.

878.—Takasukasa, Prince N. &, **Hasunuma,** K. On Birds from Johore, Malay Peninsula. Tori Tokyo **4** No. 16-17 1924 pp. 14–68 map & 6 figs. [In Japanese.]

879.—Taylor, W. P. Relation of Wild Birds to the Foot and Mouth disease. Cal. Fish and Game Sacramento **10** 1924 pp. 105–110.

880.—Taylor, W. P. G. Report of Ornithological section pp. 15–19. Additions to the Handlist of Birds pp. 45–46. Rep. Marlborough Coll. N.H. Soc. No. 72 1924.

881.—Tello, J. F. Observations sur le developpement du nerf pathétique. C.R. Soc. Biol. Paris **91** 1924 pp. 811–813.

882.—Tello, J. F. Les différenciations neuronales dans l'embryon du poulet, pendant les premiers jours de l'incubation. Trav. Labor. Recherch. Biol. Univ. Madrid **21** 1923 pp. 1–93 **64** figs.

883.—Terni, T. Ricerche sulla considetta sostanze gelatinosa (corpo glicogenico) del midollo lombo-sacrale degli Uccelli. Arch. Ital. Anat. Embr. Firenze **21** 1924 pp. 55–86 15 figs.

884.—Terni, T. Il ganglio toracico et la porzione cervicale del vago negli Uccelli. Arch. Ital. Anat. Embr. Firenze **21** 1924 pp. 404–434 10 figs.

885.—Terni, T. Ricerche sulla eosinofilopoiesi degli Uccelli. Sede, fisionomia, epoca di comparsa e durata dei centri eosinofilopoietici nel Pollo. Arch. Ital. Anat. Embr. Firenze **21** 1924 pp. 533–561.

886.—Terrill, L. M. Occurrence of the Starling in the Montreal district. Canad. Field-Nat. Ottawa **38** 1924 p. 58.

887.—Thienemann, J. XXII Jahresbericht (1922) der Vogelwarte Rositten der Deutschen Ornithologischen Gesellschaft. Journ. Ornith. Berlin **72** 1924 pp. 206–222.

888.—Thomson, A. L. The migrations of the Herring-Gull and Lesser Black-backed Gull. Results of the marking method. Brit. Bds. London **18** 1924 pp. 34–44.

889.—Thomson, A. L. Bird migration in relation to Foot and Mouth disease. Nature London **113** 1924 pp. 52–54 also H. M. **Woodcock** p. 165.

Thomson, A. L. *vide* Eifrig.

890.—Thorpe, W. H. The roosting habits of the Tree-Creeper. Brit. Bds. London **18** 1924 pp. 20–22.

891.—Ticehurst, C. B. A new race of *Grammatoptila*. Bul. Bt. Orn. Cl. London **44** 1924 p. 104.

892.—Ticehurst, C. B. The Birds of Sind. Ibis London **1924** Pt. vii pp. 110–146 pl. x. Pt. viii pp. 495–518.

893.—Ticehurst, C. B. Birds from the Red Sea Lights. Ibis London **1924** pp. 282–283.

894.—Ticehurst C. B. & **Cheesman,** R. E. New · aces of *Prinia*, *Passer*, *Ammomanes*. Bul. Bt. Orn. Cl. London **45** 1924 pp. 19–20.

895.—Ticehurst, C. B. & **Whistler,** H. On new races of *Fulvetta* and *Ixulus*. Bul. Bt. Orn. Cl. London **44** 1924 pp. 71–72.

896.—Ticehurst, C. B. and **Whistler,** H. On the type-locality of certain Birds described by Vigors. Ibis London **1924** pp. 468–473.

897.—Ticehurst, N. F. The early history of the Mute Swan in England. Brit. Bds. London **17** 1924 pp. 174–182.

898.—Tischler, F. Girlitz und Hausrotschwanz in Ostpreussen. Orn. Monatsb. Berlin **32** 1924 pp. 97–99.

899.—Tischler, F. Hakengimpel und andere Wintervögel in Ostpreussen. Orn. Monatsb. Berlin **32** 1924 pp. 99–100.

900.—Tischler, F. Neues aus Ostpreussens Vogelwelt. (Bericht über de Jahre 1914–1920). Schr. physik. Ges. Königsberg **63** 1922 pp. 113–126.

901.—Tischler, F. Beiträge zur Kenntnis der ostpreussischen Vogelwelt. (Bericht über die Jahre 1921 und 1922). Schr. physik. Ges. Königsberg **64** 1924 pp. 19–28.

902.—Todd, W. E. C. A new Song-Sparrow from Virginia. Auk Lancaster Pa. **41** 1924 pp. 147–148.

903.—Todd, W. E. C. Remarks on the genus *Amblycercus* and its allies. Proc. Biol. Soc. Washington **37** 1924 pp. 113–118.

904.—Todd, W. E. C. A new Cuckoo-Strike from Australia. Proc. Biol. Soc. Washington **37** 1924 pp. 119–120. [*Lalage.*]

905.—Todd, W. E. C. Descriptions of eight new Neotropical Birds. Proc. Biol. Soc. Washington **37** 1924 pp. 121–124 [*Tangara, Icterus, Chlorophanes*) *Arteleodacnis, Compsothlypis, Dendroica, Vireosylva.*

906.—Townsend, C. W. Diving of Grebes and Loons. Auk Lancaster Pa. **41** 1924 pp. 29–41.

907.—Townsend, C. W. The songs of Leach's Petrel. Auk Lancaster Pa. **41** 1924 pp. 148–149.

908.—Townsend, C. W. Mimicry of voice in Birds. Auk Lancaster Pa. **41** 1924 pp. 541–552.

909.—Trischitta, A. Il genere *Stercorarius* Brisson in Sicilia pp. 18–20. *Phalacrocorax pygmaeus* Pallas in Sicilia pp. 21–22. Bul. Inst. Zool. Univ. Palermo **1** No. 9-10 1923.

910.—Troughton, E. L. G. Singular nesting sites of Birds of the Nullarbor Plain. Emu Melbourne **23** 1924 pp. 215–217 2 photos.

911.—Tschusi-Schmidhoffen, V. Ornithologische Literatur des früheren Osterreich-Ungarn 1919–1921. Verh. Zool.-Bot. Ges. Wien **73** 1924 pp. 194–223.

Tucker, B. W. *vide* Horne.

912.—Turner, E. L. Broadland Birds. Pp. xvi + 172 60 photos. London (Country Life) 1924. 18vo.

913.—Turner, E. L. & **Coward,** T. A. Spring migration at Scolt Head. Trans. Norfolk Nat. Hist. Soc. Norwich **11** 1924 pp. 528–540.

914.—Tyzzer, E. E. Arsenical compounds in the treatment of Blackhead in Turkeys. J. Exper. Med. New York **37** 1923 pp. 851–873.

Ubach, F. A. *vide* Marelli.

915.—Vallentin, R. Birds : in Boyson V.F. The Falkland Islands. Pp. 284–335 Oxford (Clarendon Press) 1924. 8vo.

916.—Vallot, M. La Perdrix Roquette [*Perdix p. damascena*]. Rev. Fr. d'Orn. Paris **16** 1924 pp. 488–489.

Van Rossem, A. J. *vide* Rossem.

Van Someren, V. G. L. *vide* Someren.

917.—Van Tyne, J. Summer Birds of the Les Cheneaux Islands [Lake Huron]. Wilson Bul. Oberlin **35** 1923 pp. 21–26.

918.—Vaucher, A. Note relative a quelques espèces, oiseaux et oeufs, recueilles en Tunisie en 1923–24. Rev. Fr. d'Orn. Paris **16** 1924 pp. 453–458.

919.—Velho, P. P. P. Breve noticia sobre a Ornis do Caparáo. Bol. Mus. Nac. Rio de Janeiro **1** 1923 pp. 23–26.

920.—Velho, P. P. P. Avifauna da Serra do Itatiaya. Arch. Mus. Rio de Janeiro **24** 1923 pp. 259–264.

921.—Velho, P. P. P. Dez dias de observação sobre a fauna do Estado do Para. Arch. Mus. Rio de Janeiro **24** 1923 pp. 267–273.

Verge, J. *vide* Le Soudier.

Verge, J. *vide* Panisset.

922.—Wachs, H. Beiträge zur Ornithologie Mecklenburgs. Der Rieden-See und der Möllner See. Arch. Ver. Natg. Güstrow **75** 1922 pp. 155–201 map.

923.—Wachs, H. Beiträge zum Problem des Vogelzuges und Orientierung. Naturwissensch. Berlin **12** 1924 pp. 1189–1194.

924.—Wada, Y. Beiträge zur vergleichenden Physiologie des Gehörorganes. Arch. ges. Physiol. Berlin **202** 1924 pp. 46–69 13 figs.

Waite, E. R. *vide* Alexander.

925.—Wakiyama, S. Names of Birds of Japan and China. Tori Tokyo **4** No. 18 1924 pp. 218–229.

926.—Walker, A. Notes on some Birds from Tillamook County, Oregon. Condor Berkeley Cal. **26** 1924 pp. 180–182.

927.—Wallis, H. M. Birds on the Island of Scilly. Brit. Bds. London **18** 1924 pp. 73–74. Also A .W. **Boyd** pp. 106–108.

928.—Ward, H. B. Banding White Pelicans. Condor Berkeley Cal. **26** 1924 pp. 136–140 map.

929.—Warga, K. Vogelzugsdaten aus Ungarn. Aquila Budapest **30-31** 1924 pp. 179–237. [Magyar and German.]

930.—Watt, H. J. Dimensions of the Labyrinth correlated. Proc. R. Soc. London **B 96** 1924 pp. 334–338.

931.—Weed, C. M. and **Dearborn, N.** Birds in their relation to man: A manual of economic ornithology for the United States and Canada. 3rd ed. revised. Pp. viii + 414 many illustr. Philadelphia (Lippincott) 1924 8vo.

932.—Weidenbach, W. W. Birds noted on a trip to Cowell and the Hundred of Mangalo. S. Austr. Orn. Adelaide **7** 1924 pp. 193–196 map.

933.—Weigold, H. VII Bericht der Vogelwarte der Staatl. Biologischen Anstalt auf Helgoland. Journ. Orn. Berlin **72** 1924 pp. 17–68.

934.—Weigold, H. Das Wetter und der Herbstzug der Waldschneppe. Journ. Ornith. Berlin **72** 1924 pp. 416–421.

935.—Weigold, H. Ein thüringischer Kuckuck auf dem Wege nach Aegypten erlegt. Helgoländer Gartenrötel in den Nordwest-Pyrenäen erbeutet. Orn. Monatsb. Berlin **32** 1924 pp. 46–47.

936.—Weigold, H. Ein meteorlogisches Gutachten zu der Nordländer-Invasion im Sommer 1923 und zu der *Phylloscopus inornatus*-Welle im October 1923. Orn. Monatsb. Berlin **32** 1924 pp. 76–78.

937.—Welander, E. Duvhökens, *Astur gentilis* L., ruvningstids [Incubation period of the Goshawk]. Fauna och Flora Stockholm **1924** pp. 185–187.

Wells, T. *vide* Sclater.

938.—Wetmore, A. Description of a new Flycatcher from Argentina. Auk Lancaster Pa. **41** 1924 pp. 595–596.

939.—Wetmore, A. Food and economic relations of North American Grebes. Bul. U. S. Dept. Agr. Washington No. **1196** 1924 pp. 1–24.

940.—Wetmore, A. A Warbler from Nihoa [*Conopoderas*]. Condor Berkeley Cal. **26** 1924 pp. 177–178.

941.—Wetmore, A. Fossil Birds from southeastern Arizona. Proc. U.S. Nat. Mus. Washington **64** art. 5 1924 pp. 1–18 9 figs.

942.—Wetmore, A. and **Peters, J. L.** A new race of *Spizitornis parulus*. Auk Lancaster Pa. **41** 1924 pp. 144–146.

943.—Wheeler, H. E. Random notes from Arkansas. Wilson Bul. Oberlin **35** 1923 pp. 35–37.

944.—Wheeler, W. C. and **Nichols, J. T.** The song of the Song-Sparrow. Auk Lancaster Pa. **41** 1924 pp. 444–451.

945.—Whistler, H. A new race of *Cephalopyrus*. Bul. Bt. Orn. Cl. London **45** 1924 p. 15.

946.—Whistler, H. A note on the Weavers and Finches of the Punjab. J. Bombay N. H. Soc. **30** 1924 pp. 177–178.

947.—Whistler, H. The distribution of *Dendrocitta formosae himalayensis* Blyth. J. Bombay N. H. Soc. **30** 1924 p. 223.

Whistler, H. *vide* Ticehurst, C. B.

948.—White, H. L. Description of some new nests and eggs. Emu Melbourne **23** 1924 pp. 241–242.

949.—White, H. L. Notes on eggs collected in Central Australia by F. L. Whitlock, 1923. Emu Melbourne **23** 1924 pp. 243–247 3 photos.

950.—Whitlock, E. L. Journey to Central Australia in search of the Night-Parrot. Emu Melbourne **23** 1924 pp. 248–281 9 photos.

951.—Whittle, C. W. and **Fletcher, L. B.** Further observations on the group habit among birds. Auk Lancaster Pa. **41** 1924 pp. 327–333.

952.—Wickham, P. F. Nesting of *Cerasophila thompsoni* in Burma. J. Bombay N. H. Soc. **30** 1924 pp. 223–224.

953.—Wilder, G. D. Migration notes [nr. Peking]. China J. Sci. Arts Shanghai **2** 1924 pp. 61–63 138–139 239–241 349–351 451–453 556–559.

954.—Wilder, G. D. and **Hubbard, H. W.** List of the Birds of Chihli Province with notes. J. N. China Branch R. Asiat. Soc. **55** 1924 pp. 156–239 map.

955.—Wilkinson, A. S. Birds of the Tararuas [New Zealand]. Emu Melbourne **24** 1924 pp. 120–131 2 photos.

956.—Willier, B. H. The endocrine glands and the development of the Chick. 1. The effects of thyroid grafts. Amer. J. Anat. Philadelphia **33** 1924 pp. 67–103 7 figs.

957.—Wilson, A. S. Datos biológicos sobre aves de Santa Fé. Hornero Buenos Aires **3** 1924 pp. 246–248 4 photos.

958.—Wilson, C. J. On the occurrence of a Javanese bird, *Pycnonotus a. aurigaster* (Vieill.) in Singapore. Singapore Nat. No. 4 1924 pp. 86–87.

959.—Wilson, G. Birds of Galloway County, Kentucky. Wilson Bul. Oberlin **35** 1923 pp. 129–136 map.

960.—Witherby, H. F. and others. A practical Handbook of British Birds. Pt. 18 pp. 801–959 + i–xii many illustr. (conclusion) London (Witherby) 1924 8vo.

961.—Witherby, H. F. The "British Birds" marking scheme. Progress in 1923. Brit. Bds. London **17** 1924 pp. 231–242.

962.—W[itherby], H. F. Distinctions of the American Snipe and its occurrence in Britain. Bt. Bds. London **17** 1924 pp. 283–288 2 pls. [of tail feathers].

963.—W[itherby], H. W. Obituary. William Robert Ogilvie-Grant. Brit. Bds. London **18** 1924 pp. 104–105.

964.—[Witherby, H. F.] Recovery of marked Birds. Brit. Bds. London **18** 1924 pp. 186–191.

965.—Witherby, H. F. On a doubtful record of the breeding of the Velvet Scoter in Scotland. Bul. Bt. Orn. Cl. London **44** 1924 pp. 45–46.

966.—Witherby, H. F. *Muscicapa striata balearica* in Cameroon. Bul. Bt. Orn. Cl. London **45** 1924 p. 5.

967.—Witherby, H. F. On the breeding of the Snipe in the Iberian Peninsula. Bul. Bt. Orn. Cl. London **45** 1924 pp. 25–26.

Witherby, H. F. *vide* Swann.

968.—Wodzicki, C. Recherches sur les coeurs lymphatiques des oiseaux. Bul. Intern. Acad. Pol. Cracovie **1924** B pp. 425–431 2 pls.

969.—Wolda, G. Akklimatisierung und Deklimatisierung. Resultate ornithologischen Untersuchungen in der Jahre 1907–23. Genetica 's Gravenhage **5** 1923 pp. 497–526 2 pls.

970.—Wolstenholme, H. Some Jervis Bay Birds. Emu Melbourne **24** 1924 pp. 117–120.

971.—Wood, C. A. The Birds of Fiji. Extr. "Handbook of Fiji." Suva (Govt. Printer) 1924.

972.—Wood, C. A. The Polynesian Fruit Pigeon, *Globicera pacifica*, its food and digestive apparatus. Auk Lancaster Pa. **41** 1924 pp. 433–438 fig.

973.—Wood, C. A. My quest of the Imperial Parrot. Avicult. Mag. London (4) **2** 1924 pp. 57–59 77–81.

974.—Wood, C. A. The Golden Doves of Fiji. Bird-Lore Harrisburg Pa. **26** 1924 pp. 387–390 fig.

975.—Wood, C. A. The Starling family at home and abroad. Condor Berkeley Cal. **26** 1924 pp. 123–136 1 pl.

976.—Wood, C. A. Heterochrosis in the Crimson-Breasted Parrot, *Pyrrhulopsis splendens.* Emu Melbourne **23** 1924 pp. 161–162 col. pl.

Woodcock, H. M. *vide* Thomson.

977.—Woodruff, F. M. Conditions of the breeding Game-birds in North Dakota, expedition of the Chicago Academy of Sciences. Wilson Bull. Oberlin **35** 1923 pp. 4–20 photos.

978.—Woods, R. S. Notes on the life history of the Texas Nighthawk. Condor Berkeley Cal. **26** 1924 pp. 1–6 4 photos.

Workman, W. H. *vide* Stendall.

979.—Yamashima, Marquis Y. Birds from the eastern parts of the Prov. Suruga. Tori Tokyo **4** No. 16-17 1924 pp. 1–13 [in Japanese].

980.—Yocom, H. B. Luteal cells in the gonad of the Phalarope. Biol. Bul. Wood's Hole Mass. **46** 1924 pp. 101–105 2 figs.

981.—Yocom, H. B. and **Phillips,** B. I. Luteal cells and sexual dimorphism of feathering in wild Birds. Amer. Nat. New York **58** 1924 pp. 572–574.

982.—Zavaltari, E. Vertebrati di Cirenenaica raccolti dal Generale Medico Prof. Francesco Testi. Uccelli. Atti Soc. Nat. Mat. Modena **53-4** 1924 pp. 21–22.

983.—Zdobnitzky, F. Neue Bereicherung der südmährischen Avifauna. Vehr. Natf. Ver. Brünn **58** 1923 pp. 89–92.

984.—Zedlitz, O. Graf. Aus der Kinderstube schwedischer Brutvögel. i Bilder aus dem schwedischen Waldlande. 1. Der Polartaucher (*Colymbus arcticus arcticus* L.). Beitr. Fortpfl.-biol. Vög. Berlin **1** 1924 pp. 4–6. 2. Der Gänsesäger (*Mergus merganser merganser*) t.c. pp. 25–26.

985.—Zedlitz, O. Graf. Das Gewicht als Rassenmerkmal bei *Tetrao urogallus.* Journ. Ornith. Berlin **72** 1924 pp. 244–252.

986.—Zedlitz, O. Graf. *Phylloscopus trochilus eversmanni* auf Helgoland ? Orn. Monatsb. Berlin **32** 1924 pp. 34–37.

987.—Želisko, J. V. La faune quaternaire de Volyně. Sbornik Statn. Geol. Ust. Ceskoslow. Praze (Prague) **4** 1924 pp. 101–115.

988.—Zimmer, J. T. New Birds from Central Peru. Field Mus. Publ. Zool. Chicago **12** 1924 pp. 51–67.

II.—SUBJECT INDEX.

For full reference, vide Titles.

COMPREHENSIVE AND GENERAL.

History. — Ringneck Pheasant, Stresemann, **855**; Domestic Fowl, Stresemann, **847**; Swan, N. F. Ticehurst, **897**; Surinam ornithology, Penard, **665**; Early Indian ornithologists, Ticehurst & Whistler, **896**; Sonnerat's Voyage, W. B. Alexander, **7**; White's voyage to New South Wales, W. B. Alexander, **6**; Chinese Phoenix and its identification, Hachiruka, **325**; Birds in Chinese poetry Arlington, **17**; Owl in Indian Folklore, Modi, **598**.

Biography.—Obituary notices, M. C. H. Bird, Long, **516**; Riviere, **718**; E. J. Brook, Sclater, **786**; C. Chubb, Sclater, **786**; H. H. Godwin-Austen, Sclater, **784**; W. H. D. Le Souef, Anon., **15**; H. P. Maasdam, Heuen, **376**; H. Nyqvist, P. —, **652**; W. R. Ogilvie-Grant, Sclater, **785**; Witherby, **963**; N. C. Rothschild, Sclater, **783**; T. Salvadori, Arrigoni, **20**; Hartert, **346**; Laubmann, **490**; Sclater, **782**; C. Swinhoe, Sclater, **784**; V. Ritter von Tschusi, Almásy, **9**; Gengler, **267, 269**; Kleinschmidt, **451**; Sclater, **784**; A. H. Winge, Schiøler, **760**; Sclater, **784**; D. C. Worcester, Sclater, **786**; Autobiography, J. Mailliard, **558**.

General and Popular Works.—Baker, **37**; Boubier, **98**; Cathelin, **138**; Dawson, **188**; Dewar, **198**; Finn, **243**; Heinroth, **361**; Hoffmann, **380**; Mathews, **567**; Phillips, **678**; Stone, **821**; Tait, **877**; Turner, **912**; Witherby, **960**.

Bibliography.—Austro - Hungary, TSUCHUSI, **911**; Russia, JOHANSEN, **420**; SCHARLEMAN, **753**; California, GRINNELL, **304**; Ogilvie - Grant's writings, SCLATER, **785**; Salvadori's writings, ARRIGONI, **20**; Charadriiformes, LOW, **536**.

Institutions and Collections.—Catalogue of Tring Museum types, HARTERT, **349**; Report of the Bird station at Heligoland, WEIGOLD, **933**; Catalogue of the Kyoto Univ. Museum, KURODA, **471**.

Technique and Methods.—Of recording birds' song, ROWAN, **740**; Bird migration and plumage change, HAUSMAN, **355**; "Occurence," CORTI, **173**; Injecting chick embryos, EARLE, **219**.

Economics (see also food-habits p. 42).—General, GLADSTONE, **291**; Textbook, WEED & DEARBORN, **931**; Birds as disease carriers, TAYLOR, **879**; Methods of fattening Fowls, KATAYAMA **439**; British Birds, COLLINGE, **167**; of single species, ALLEN, **8**; W. E. HOFFMANN, **384**; MUNRO, **614**; SCIACCHIATANO, **777**; WETMORE, **939**.

Conservation and Protection. — General, LOYD, **541**; CSORGEY, **179**; In South Africa, A. ROBERTS, **722**; in New Zealand, SLADDEN, **800**.

Extinction.—Of Australian Birds, ASHBY, **21**; of the Pink-headed Duck, BUCKNILL, **121**; LÖNNBERG, **523**.

Naturalization and Acclimatization.—Of the Starling family, WOOD, **975**; Californian Quail in Chile, REED, **696**.

Aviculture.—ASTLEY, **27**, **28**, **29**; BEEVER, **70**; BRIGHT, **113**; BUTLER, **132**; DELACOUR, **191**; EZRA, **232**, **233**; LAW, **498**; SHORE-BAILY, **795**, **796**.

Nomenclature.—General Principles, STRESEMANN, **823**; Special cases and changes, B. O. U. COMMITTEE, **97**; LAUBMANN, **487**; LÖNNBERG, **532**; OBERHOLSER, **637**; A ROBERTS, **720**; STRESEMANN, **824**, **845**; Vernacular names in China and Japan, WAKIYAMA, **925**; Sumatra, ROBINSON & KLOSS, **726**; Argentina, ARRIBALZAGA, **19**; Pennsylvania, BECK, **68**.

Phylogeny, Classification and Taxonomy.—The subspecies question, CHAPMAN, **148**; GEYR, **277**; KLEINSCHMIDT, **452**; Type-localities, TICEHURST & WHISTLER, **896**; Phylogeny and classification of *Smithornis*, LOWE, **539**; Cuckoos, IHERING, **408**; Kingfishers, LAUBMANN, **487**; Fringillidae, SUSHKIN, **862**; *Pyrenestes*, CHAPIN, **142**.

Ethics of private collections.—ASHBY and others **26**.

STRUCTURE.

Plumage and Epithelial Structures.—Ptilosis, W. de W. MILLER, **593**, **595**; Uropygial glands, SCHMIDT, **766**.

Nervous System and Sense Organs.—Brain, GROEBBELS, **308**; RENDAHL, **697**; Spinal cord, TERNI, **883**; Sympathetic ganglia, LISI, **514**; Thoracic ganglia and vagus, TERNI, **884**; Innervation of skin, KAISER, **434**; Eye, KOLMER, **461**, **462**; Choroid plexus, COUPIN, **175**; Pecten, MANN, **561**; Dimensions of the ear labyrinth, WATT, **930**.

Osteology.—Proatlas, HAYEK, **359**; Pubis, MARCUCCI, **562**; Pelvis and sexual differentiation, KNOBEL, **457**.

Alimentary Canal.—Gizzard, DUERDEN & BROCK, **212**; WOOD, **972**; Pancreas, CLARA, **160**; Mesenteries, FLEISCHMANN, **246**.

Organs of Circulation.—Blood supply of internal ear, SNAPP, **802**; Sinus durae matris, GELDEREN, **265**, **266**; Coeliac artery, BREMER, **110**; Renal-portal veins, DAS, **187**; SPANNER, **809**; Lymph hearts, WODZICKI, **968**.

Myology.—DERSCHEID, **195**.

Organs of Reproduction.—Right and left positions, RIDDLE, **709**; Right ovary in Accipitres, STIEVE, **819**, **820**; Luteal cells of ovary, FELL, **238**; YOCOM, **980**; YOCOM & PHILLIPS, **981**; Intertubular tissue of testis, GOODALE, **297**; Vesiculae seminales, ALVERDES, **11**; Penis in Ducks, GHIGI, **282**; Egg shell, LEROY, **504**.

Cytology.—Fat-cells, LUBOSCH, **543**; Golgi apparatus, BRAMBELL, **104**; Chromosomes, HANCE, **336**; SHIWAGO, **794**.

Anatomy of Special forms.—*Smithornis*, LOWE, **539**; *Mesoenas* and *Monias*, LOWE, **540**.

PHYSIOLOGY.

Nervous System and Sense Organs.—Cerebellum, BREMER, **109**; Reflex action, GROEBBELS, **309**; Vision, KOLMAR, **462**; ROCHON-DUVIGNEAUD, **731**; Colour-vision, ERHARD, **228**; Hearing, WADA, **924**; Semi-circular canals, MOUQUET & GIRARD, **610**.

Respiration.—General, BRANDES, **106**; in embryo, M. R. LEWIS, **509**; RIDDLE, **708**; Air-sacs in flight, BILLARD, **89**.

Digestion.—General, KOLDERUP, **460**; Lactose, HAMILTON & CARD, **334**; HAMILTON & MITCHELL, **335**; Grit in Gizzard, KAUPP, **441**; Fattening processes, KATAYAMA, **439**; Vitamines, PUGLIESE & LOCATELLI, **688**; Viability of seeds through alimentary canal, SAYLE, **752**.

Other organs and functions.—Muscle fibre, OLIVO, **645**; Thymus, RIDDLE & OTHERS, **706**; Kidney, MAYRS, **574**.

Reproduction.—Ovulation, BRODY, **114**; BAUDRIMONT, **65, 66**; LATASTE, **481**.

Experimental Physiology.—Endocrine action and testis, BENOIT, **75**; Pineal gland, BADERTSCHER, **33**; DESOGUS **196**; Thyroid, GIACOMINI, **284**; Experiments in digestion, RANDOIN & SIMONNET, **691**; Blood sugar and reproduction, RIDDLE & OTHERS, **706**; Castration experiments, ATHANASIU & PEZARD, **30**; BENOIT, **73, 78**; Experimentally caused characters transmitted, PEZARD & OTHERS, **675**; Polymorphism, PEZARD & OTHERS, **674**; Experimental gynandromorphism, PEZARD, SAND & CARIDROIT, **672**; Ligation of vas deferens, NONIDEZ, **635**; Hypomasculinism, BENOIT, **77**; Artificial fecondation, IWANOW, **412**; Grafting experiments, DANTSCHAKOFF, **185**; DANCHAKOFF & AGASSIZ, **186**; HOADLEY, **379**; PEZARD & OTHERS, **673. 677**; SECHI, **788**; Injection experiments, COTTE, **174**; X Rays and testis, BENOIT, **79**; Violet light, HUGHES & PAYNE, **400**; Eosinphilous cells, TERNI, **885**; Tissue in vitro experiments, FAZZARI, **237**; SHEARER, **792**.

Chemical Physiology.—Feather pigments, GÖRNITZ & RENSCH, **300**; Porphyrin, FISCHER & HILGER, **244, 245**.

Miscellaneous.—Growth, BRODY, **115**; LATIMER, **483**; KAUFMAN, **440**; of interstitial cells, MAZZA, **575**; Water-absorption in early stages, BARTELMEZ & RIDDLE, **59**; Coagulation in the egg, AMAR, **12**.

EMBRYOLOGY.

Early Stages.—Genesis of pigment, RENYI, **701**; Nerve differentiation, TELLO, **882**; Muscle fibres, OLIVO, **645**.

Nervous system.—Mid-brain, RENDAHL, **697**; Cranial nerves, TELLO, **881**; Abnormal nervous system, GAWRILENKO, **264**.

Other organs.—Heart, FUCHS, **253**; Vascular system, EARLE, **219**; Neurocranial veins, GELDEREN, **266**; Lymphhearts, WODZICKI, **968**; Sternum and clavicle, HOMMES, **390**; Respiration organs of embryo, RIDDLE, **708**; Superior oblique muscle of eye, REX, **703**; Cloaca and allantois, BOYDEN, **102**; Water absorption in early stages, BARTELMEZ & RIDDLE, **59**.

Reproductive Organs. — Origin of germ cells, GATENBY, **261**; Origin and migration of gonocytes, DEFRETIN, **190**; Sexual organs, BENOIT, **74**.

Experimental and Chemical Embryology.—Effects of grafts, WILLIER, **956**; HUXLEY & MURRAY, **405**; of cold, MAURO, **572**; Chemical changes in egg contents, PLIMMER & LOWNDES, **681**.

ETHOLOGY.

General habits and Field Observations.—ALLEN, **8**; BREWSTER, **111**; BURKITT, **125, 126**; CHAPIN, **143**; HAVILLAND, **356**; HOWELL, **397**; LYNES, **547**; R. MEINERTZHAGEN, **581**; MELL, **587**; ROSS, **733**; C. B. TICEHURST, **892**; TURNER, **912**.

Miscellaneous habits. — Roosting, STEWART, **818**; Flocking and Social habits, SHERMAN, **793**; WHITTLE & FLETCHER, **951**.

Food-habits.—British birds, COLLINGE, **167**; Swiss birds, PONCY, **682**; Panama, HALLINAN, **333**; U.S.A., BLINCOE, **92**; GABRIELSON, **255**; WETMORE, **939**; *Lagopus*, HOLMBOE, **388**; Owls and Hawks, GRESCHIK, **302**;

Rostrhamus, LANG, **477**; *Otus*, NAUMAN, **624**; Woodpeckers, SWAEN, **866**; Swallow, HORNE, **391**; Sparrow, SCIACCHITANO, **777**.

Migration, General Problems. — General, BODNAR, **95**; FERROUILLAT, **241**; Duration of light, EIFRIG, **225**; Orientation, WACHS, **923**; Relation to disease-carrying, THOMSON, **889**; Migration routes, LUCANUS, **544**; Across high mountains, ALMASY, **10**; Effect of Föhn wind, HAECKER, **328**; Migration to Africa, GROMIER, **310**; Routes across the Sahara, GEYR, **272**; Charts and methods of illustrating, HAUSMAN, **355**.

Migration, Local Observations.— British Isles, WITHERBY, **961**; Berkshire, JOY, **430**; I. of Wight, MOREY, **608**; Norfolk, RIVIERE, **716**; TURNER & COWARD, **913**; Staffordshire, SMITH, **801**; ROYDS, **742**; Scotland, RINTOUL & BAXTER, **714**; France, PETIT, **668**; Scandanavia, SCHIØLER, **761**; Denmark, HØRRING, **393**; Heligoland, BANZHAF & PANZER, **55**; WEIGOLD, **936**; Baltic, HORTLING, **394**; Hungary, SCHENK, **756, 757**; WARGA, **929**; NAGY, **621**; Egypt, R. MEINERTZHAGEN, **584**; North China, WILDER, **953**; Japan, MATSUDAIRA, **571**; Red Sea, C. B. TICEHURST, **893**; India, BRIGGS, **112**; Sind, C. B. TICEHURST, **892**; U.S.A., LYON, **549**; OBERHOLSER & CHAPMAN, **641**; Oregon, SWARTH, **869**; Georgia, MAY, **573**; Pennsylvania, BURLEIGH, **128**; Maine, BREWSTER, **111**; Canada, PREECE, **686**.

Migration of.—*Larus*, PEDERSEN, **663**; THOMSON, **888**; *Scolopax* KLINGE, **454**; SCHENK, **756**; WEIGOLD, **934**; *Pelecanus*, WARD, **928**; *Dafila*, LINCOLN, **511**; *Apus*, ECKARDT and others, **222**.

Migration, Bird-marking.—Methods, LINCOLN, **512**; Results in British Isles, WITHERBY, **961, 964**; STENDALL, **815**; Germany, THIENEMANN, **887**; WEIGOLD, **935**; Heligoland, WEIGOLD, **933**; in Hungary, SCHENK, **757**; U.S.A., LINCOLN, **510**; LYON, **549**; MAY, **573**; Canada, ANON., **14**; DE LURY, **193**.

Flight.—Mechanical problems, BREGUET, **108**; HANKIN & NORTH, **338**; HARDCASTLE, **340**; KAHN, **433**; KARPEN, **437, 438**; NORDMANN, **636**; Soaring flight, HANKIN, **337**; of Albatross, IDRAC, **406, 407**; Use of the air-sacs in flight, BILLARD, **89**.

Diving Habits.—J. M. DEWAR, **199**; TOWNSEND, **906**.

Sexual Relations and Display.—*Fulmarus*, BOASE, **93**; *Podiceps*, HUXLEY, **403**; *Machetes*, MOFFAT, **599**; *Ardea*, HUXLEY, **404**; *Anas*, GEYR, **273**; *Bucephalus*, BOASE, **94**; *Otus*, DUBOIS, **211**; *Caprimulgus*, REBOUSSIN, **730**.

Nidification and Oology, General.— BURNS, **129**; Vigour and egg-pigmentation, AVERILL, **31**; Weight of eggs, HANNA, **339**; Size of clutch and latitude, RAW, **693**; Desert-living birds, HARTERT, **342**; Variation in Fowl's eggs, SCHJELDRUP-ELBE, **762**; Teratological Eggs, LATASTE, **479**; Pipits transport nestlings, LENGERKEN, **502**.

Nidification. Local Observations.— Holland, WOLDA, **969**; Spitsbergen, CONGREVE, **169**; Luxembourg, GALASSE, **257**; Brandenburg, SCHUSTER, **774**; Hungary, CONGREVE, **170**; Tunisia and Algeria, BALSAC, **43**; VAUCHER, **918**; Egypt, KOENIG, **459**; Syria, G. v. H. CLARKE, **161**; Mongolia, SUSHKIN, **863**; French Sudan, HARTERT, **347**; Darfur, LYNES, **547**; Nyasaland, BELCHER, **71**; C. C. ROBERTS, **724, 725**; Cape Prov., PAGET-WILKES, **653**; Cape Verde Is., MURPHY, **619**; India, R. S. P. BATES, **64**; GILL, **287**; Bengal, LAW, **500**; Sind, C. B. TICEHURST, **892**; S. China, MELL, **587**; Java, BARTELS, **61**; SPENNEMANN, **810**; Australia, TRAUGHTON, **910**; H. L. WHITE, **949**; WHITLOCK, **950**; Tasmania, SHARLAND, **791**; Falkland Is., VALLENTIN, **915**; Argentina, A. S. WILSON, **957**; DINELLI, **202**; Brazil, SKINNER, **799**; Panama, HALLINAN, **333**.

Nidification, Single Species.—BOXBERGER, **101**; BRANDT, **107**; BROWN, **117, 118**; BÜSING, **130**; CAMPBELL, **134**; DAGUERRE, **183**; DIXON, **203**; ESTANOVE, **229**; EZRA, **233**; FALLA, **234**; FINLEY, **242**; GARNIER, **259**; GIBERT, **285**; GAUKRODGER, **263**; J. A. GILLESPIE, **288**; GLEGG, **292, 293**; GOGERLEY, **296**; HEINROTH, **364**; HENDERSON, **370, 371**; HERRICK, **373, 374, 375**; HOWE, **396**; HUXLEY, **404**; INGRAM & SALMON, **410**; KUHK, **465**;

LAW, **501**; LEOPOLD, **503**; F. LEWIS, **507**; MACGILLIVRAY, **550**; MARLOW, **565**; MORGAN, **609**; MOUSLEY, **611**; MURIE, **617**; OSMASTON, **651**; REBOUSSIN, **694**; RITCHIE, **715**; S. M. ROBINSON, **728**; SAWAHARA, **751**; SHORE-BAILY, **795**, **796**; SPRUNT, **812**; SUTTON, **864**; SYMONS, **871**; SZIELASKO, **875**; H. L. WHITE, **948**; WICKHAM, **952**; WOODS, **978**; ZEDLITZ, **984**.

Cuckoo Problems.—BUNYARD, **123**; CHANCE, **141**; DOBAY, **204**; HORNE & TUCKER, **392**; HUMPHRYS, **401**; IHERING, **408**; SCHOLEY, **769**; Indian Cuckoo Problems, RATTRAY, **692**; Mimicry in Cuckoo eggs, RENSCH, **699**; STRESEMANN, **835**.

Voice and Song.—General, A. A. SAUNDERS, **748**; CSÖRGEY, **179**; HEINROTH, **363**; Song and breeding, CHRISTOLEIT, **159**; In high mountains, DORNO, **210**; Evening song, HAECKER, **327**; Mimicry, TOWNSEND, **908**; Individual song recognizable, A. A. SAUNDERS, **747**; Method of recording, ROWAN, **740**; Song in the Tyrol, B. HOFFMANN, **383**.

Song or Note of.—*Oceanodroma*, TOWNSEND, **907**; *Podiceps*, HEYDER, **378**; *Gallinago*, HOFFMAN, **381**; *Asio*, DUBOIS, **211**; GEYR, **274**; *Iynx*, *Parus*, *Passer*, SZEMERE, **874**; *Erythrosterna*, MURR, **620**; *Turdus*, STUBBS, **860**; *Erithacus*, BURKITT, **126**; *Parus*, BACMEISTER, **32**; BOUBIER, **100**; *Certhia*, B. HOFFMANN, **382**; *Melospiza*, WHEELER & NICHOLS, **944**; *Pyrrhocorax*, ERHARD, **227**.

Psychology.—CARLIER, **135**; KROHN, **464**; RÉVÉSZ, **702**; RIEKEL, **710**; SCHJELDERUP-EBBE, **763**, **764**.

Colour and Moult.—Charts for explaining plumage-change, HAUSMAN, **355**; Moult of King Penguin, T. H. GILLESPIE, **289**; Ducks, SCHIØLER, **761**; *Cariama*, HEINROTH, **362**; Kingfishers, LAUBMANN, **492**; *Emberiza*, STRESEMANN, **838**.

Ecology and Relations to external conditions.—Frequency of birds in the mid-Atlantic, JESPERSEN, **419**; changes due to insular isolation, RENSCH, **700**; Faunal change due to desiccation, LÖNNBERG, **525**; Influence of external conditions in Holland, WOLDA, **969**.

Pathology.—DONATIEN and others, **209**; EBERT & SCHULGINA, **221**; EDINGTON, **223**; KAUPP & DEARSTYNE, **442**; LE SOUDIER & VERGE, **505**; MARELLI & UBACH, **564**; MOUQUET & GIRARD, **610**; PANISSET & VERGE, **655**, **656**; PESCH & SCHÜTT, **666**; THOMSON, **889**; TYZZER, **914**.

Mortality.—At lighthouses, MUNRO, **615**.

VARIATION AND ÆTIOLOGY.

Variation. — Mutation Studies, STRESEMANN, **825**, **839**, **852**; Colour-variation, STRESEMANN, **850**; WOOD, **976**; SETH-SMITH, **789**; Albinism in Gulls, STRESEMANN, **857**; Hairy albescent Jay, HARRISON, **341**; Variation in size of bill, CHAPIN, **142**; Laws of variation in insular faunas, RENSCH, **700**; In bone-length, SCHNEIDER & DUNN, **767**.

Teratology.—GATENBY & BRAMBELL, **262**; JAQUET, **415**; LATASTE, **478**; Monster eggs, LATASTE, **479**, **482**.

Hybrids.—Fertility in hybrids, GHIGI, **281**; Hybrid *Alectoris*. MOLTONI, **603**; *Gallus*, LOTSY & KNIPER, **535**; *Anser*, KURODA, **473**; *Polytelis*, ASTLEY, **28**; *Certhia*, DOBBRICK, **206**

Genetics.—AGAR, **2**; CREW, **178**; DUNCKER, **214**; GHIGI, **278**, **283**; LOTSY & KNIPER, **535**; PÉZARD & CARIDROIT, **676**.

Sexual Problems (see also under Physiology, p. 42). — BENOIT, **76**; BRAMBELL, **105**; GOODALE & NONIDEZ, **298**; JULL, **431**; PÉZARD, **669**, **670**, **671**; RIDDLE, **707**.

Fossil and Extinct Birds.—SINCLAIR, **798**; WETMORE, **941**; Fossil eggs, ANDERSSON, **13**.

GEOGRAPHY AND FAUNAS.

General Problems.—BOUBIER, **99**.

PALAEARCTIC REGION.

General.—BIANCHI, **86**; HEINROTH, **361**.

British Islands.—H. G. ALEXANDER, **4**; ARNOLD, **18**; GLADSTONE, **290**; ROTHSCHILD, **736**; WITHERBY, **960**.

British Counties.—Sussex, BUTTERFIELD, **133**; Surrey, BUNYARD, **122**; Hertfordshire, BICKERTON, **87**; OLDHAM, **642, 643**; Berkshire, JOURDAIN, **426**; JOY, **430**; Oxfordshire, JOURDAIN **429**; I. of Wight, FOX, **252**; Dorsetshire, BLATHWAYT, **91**; Wiltshire, TAYLOR, **880**; Cornwall, HARVEY, **354**; Essex, GLEGG, **294**; Norfolk, LONG & RIVIERE, **517**; RIVIERE, **716, 717, 719**; TURNER, **912**; TURNER & COWARD, **913**; Warwickshire, B. A. CARTER, **136**; Staffordshire, SMITH, **801**; Cheshire, COWARD, **177**; HENDY, **372**; Lancashire, COWARD, **177**; HOLDER, **385**; Cumberland, BROWN, **119**; Cumberland and Westmoreland, DUNLOP, **215**; Northumberland (Farne Is.), v. OORDT, **649**.

Wales.—Glamorgan, INGRAM & SALMON, **410, 411**; Pembroke, ACLAND & SALMON, **1**.

Scotland.—BAXTER & RINTOUL, **67**; v. OORDT, **649**; RINTOUL & BAXTER, **714**; Lanarkshire, STEWART, **818**.

Ireland.—BRAMBELL, **103**; RENOUF, **698**; SWANN, **868**; Co. Mayo, RUTTLEDGE, **743**.

Smaller British Islands.—Hebrides, W. E. CLARKE, **162**; R. MEINERTZHAGEN, **580, 586**; Mull, R. MEINERTZHAGEN, **577**; Isle of Man, RALFE, **689, 690** Scilly, WALLIS, **927**; Guernsey, ROWSWELL, **741**.

France.—LAVAUDEN, **497**; Finistère, HÉMERY, **369**; Charente, PAILLERETS, **654**; Gironde, CHAINE, **140**; Landes, CHAINE, **139**; Bouches de Rhône (Camargue), GLEGG, **292, 293**; Isle de Riou, BALSAC, **44**; Alpes-Maritimes, LAVAUDEN, **495**; SNOUCKAERT, **805**.

Germany.—BÜSING, **131**; STRESEMANN, **851**; Rhineland, GEYR, **275, 276**; JORDANS, **423**; NEUBAUR, **627**; Palatinate, GASCHOTT, **260**; Hesse, SCHUSTER, **775**; Schleswig-Holstein, HAGEN, **330**; Lübeck, HAGEN, **329, 331**; Mecklenburg, CLODIUS, **165, 166**; LÜBCKE, **542**; WACHS, **922**; Pomerania, ROBLEN, **729**; Brandenburg, SCHIERMANN, **758, 759**; SCHUSTER, **774**; West Prussia, DOBBRICK, **207**; East Prussia, CHRISTOLEIT, **158**; DOBBRICK, **208**; LA BAUME, **475**; LÜTTSCHWAGER, **545, 546**; THIENEMANN, **887**; TISCHLER, **898, 899, 900, 901**; Heligoland, BANZHAF, **53, 54**; NATORP, **623**; WEIGOLD, **933**; ZEDLITZ, **986**.

Austro-Hungary.—TSCHUSI, **911**; Austria, ZDOBNITZKY, **983**; Hungary, CONGREVE, **170**; NAGY, **621**; SCHENK, **755, 756, 757**; WARGA, **929**; Bohemia and Styria, MICHEL & REISER, **589**.

Switzerland.—H. G. ALEXANDER, **5**; BURG, **124**; COMTE, **168**; KENNEDY, **444**; LAFOND, **476**; MASAREY, **566**; PONCY, **683**.

Holland.—EYKMAN, **230, 231**; MALSSEN, **560**; OOMEN, **647**; OORDT, **648, 650**; PELLINKHOF, **664**; SNOUCKAERT, **806**.

Belgium.—CONTRERAS, **172**; DUPOND, **216, 217**; HAVRE, **357, 358**.

Denmark.—BARFOD, **56**; HELMS, **368**; HØRRING, **393**; JARLUND, **416**; JESPERSEN, **418**; OLSEN, **644**; PEDERSEN, **662**; SCHEEL, **754**; SCHIØLER, **761**.

Norway.—JOHNSEN, **421**.

Sweden.—ENGHOLM, **226**; FORSSLUND, **251**; HOLM, **386, 387**; LÖNNBERG, **521, 522, 525, 526, 527, 528, 529**; PAULSSON, **658**; ROSENBERG, **732**; ZEDLITZ, **984**.

Spitsbergen.—CONGREVE, **169**; LONGSTAFF, **518**.

Russia (including seceded States).—Petrograd Gov., BIANCHI, **85**; Ukraine, SCHARLEMAN, **753**; Crimea, MOLČANOW, **600**; Finland, HORTLING, **395**; LÖNNBERG, **524**; Esthonia (Oesel I.), SZELIGA-MIERZEYEWSKI, **873**; Poland, MICZYNSKI, **590**; SZTOLCMAN, **876**.

Spain.—PARDO, **657**; SILLEM, **797**.

Portugal.—TAIT, **877**; WITHERBY, **967**.

Italy.—B. HOFFMANN, **383**; MOLTONI, **602**.

Balkan States.—Serbia, ESTANOVE, **229**; Macedonia, GLEGG, **295**; Rumania, DOBAY, **205**; KAMNER, **435, 436**.

Mediterranean Islands.—Balearic Is., JORDANS, **422**; Minorca, MUNN, **613**; Corsica, OOMEN, **646**; Sardinia, SCIACCHITANO, **776**; Sicily, RIEVA, **711**; STEFANI, **813**; TRISCHITTA, **909**; Malta, DESPOTT, **197**.

North Africa.—Morocco, HARTERT, **343**, **345**; LYNES, **548**; Algeria, BALSAC, **43**, **45**; HEIM DE BALSAC, **360**; JOURDAIN, **427**; MOLTONI, **601**; Tunisia, BALSAC, **43**; HEIM DE BALSAC, **360**; LAVAUDEN, **493**; VAUCHER, **918**. Cirenaica, GHIGI, **279**; ZAVATTARI, **982**; Egypt, HACHISUKA, **324**; KOENIG, **459**; R. MEINERTZHAGEN, **584**; Red Sea, C. B. TICEHURST, **893**.

Western Asia.—Syria, G. v. H. CLARKE, **161**; Syrian desert, R. MEINERTZHAGEN, **581**; Iraq, R. MEINERTZHAGEN, **582**; Western Arabia, TICEHURST & CHEESMAN, **894**.

Russian Asia.—Siberia, KOSHANTISCHIKOV, etct., **463**.

Central Asia.—Tibet, JACOBI, **414**.

Japan.—HACHISUKA, **326**; KURODA, **466**, **467**, **469**, **470**, **471**; MATSUDAIRA, **571**; MOMIYAMA, **604**, **605**; SAITO, **745**; YAMASHIMA, **979**.

Eastern Palaearctic Asia.—Kurile Is., KURODA, **469**; Corea, KURODA & MORI, **474**; Northern China, BERLIOZ, **82**; HUBBARD, **398**; JACOBI, **414**; LÖNNBERG, **531**; WILDER, **953**; WILDER & HUBBARD, **954**.

ETHIOPIAN REGION.

General.—BANNERMAN, **51**, **52**; CHAPIN, **142**; GROMIER, **310**; SCLATER, **778**, **779**, **780**; STRESEMANN, **832**.

West Africa.—Senegal, GROTE, **315**; French Sahara, HARTERT, **347**; Gold Coast, SCLATER, **781**; N. Nigeria, BATES & BANNERMAN, **63**; Cameroon, BATES & BANNERMAN, **63**; GROTE, **312**, **313**, **314**, **315**; WITHERBY, **966**; Spanish Guinea, GROTE, **315**; French Congo, BANNERMAN, **49**; RILEY, **712**; Belgian Congo, BANNERMAN, **49**; Gyldenstolpe, **321**; SACEGHEN, **744**; SASSI, **746**; SCHOUTEDEN, **770**, **771**, **772**; STRESEMANN, **848**; Loango (Landana), STRESEMANN, **827**.

South Africa.—A. ROBERTS, **720**, **721**, **722**; Cape Province, MENEGAUX, **588**; Paget-Wilkes, **653**; SYMONS, **872**; S.W. African Protectorate, GYLDENSTOLPE, **320**; A. ROBERTS, **723**.

Central and East Africa.—Nyasaland, BELCHER, **71**; C. C. ROBERTS, **724**, **725**; Tanganyika Territory, GRANT, **301**; GROTE, **311**; R. MEINERTZHAGEN, **578**; Pemba I., BANNERMAN, **48**; Kenya Colony, BANNERMAN, **50**; MENEGAUX, **588**; v. SOMEREN, **808**; STRESEMANN, **841**; Uganda, MENEGAUX, **588**; GYLDENSTOLPE, **321**; SASSI, **746**.

North-East Africa.—Anglo-Egyptian Sudan, HACHISUKA, **322**; GYLDENSTOLPE, **321**; Darfur, LYNES, **547**.

Arabia.—Aden, R. MEINERTZHAGEN, **583**.

Madagascar.—HARTERT, **343**; MOUNIER, **607**.

Other African Islands.—Comoro, HARTERT, **349**; MEINERTZHAGEN, **578**; STRESEMANN, **837**; Cape Verde Is., MURPHY, **619**; Ascension, HUCKLE, **399**; LOWE, **537**; St. Helena, HUCKLE, **399**; Tristan d'Acunha, LOWE, **537**; STENHOUSE, **816**;

INDIAN REGION.

General.—BAKER, **39**; R. MEINERTZHAGEN, **579**.

Indian Empire and Ceylon.—India, BAKER, **37**, **42**; R. S. P. BATES, **64**; D. DEWAR, **198**; FLETCHER & INGLIS, **250**; Sind, SODHI, **807**; C. B. TICEHURST, **892**; Punjab, WHISTLER, **946**; United Provinces, GILL, **287**; Bengal, LAW, **500**; Himalaya, BAKER, **38**; KINNEAR, **449**; STEVENS, **817**; C. B. TICEHURST, **891**; TICEHURST & WHISTLER, **895**, **896**; WHISTLER, **945**; Assam, BAKER, **38**, **40**, **41**; BURMA, KINNEAR **448**, **449**.

Malayia.—STRESEMANN, **848**; Malay Peninsula, CHASEN, **150**, **151**, **152**; CHASEN, & KLOSS, **153**; OBERHOLSER, **638**; TAKASUKASA & HASUNUMA, **878**; C. J. WILSON, **958**; Sumatra, OBERHOLSER, **638**, **639**; ROBINSON & KLOSS **726**; STRESEMANN, **824**; Christmas I., CHASEN & KLOSS, **154**; Borneo, OBERHOLSER, **638**, **640**; Java, BARTELS, **60**; ROBINSON & KLOSS, **727**; SPENNEMANN, **810**; Philippine Is., MCGREGOR, **553**; OBERHOLSER, **638**.

Indo-China and Southern China.—Siam, BAKER, 38; KINNEAR, 448, 450; KLOSS, 456; RILEY, 713; Annam, DELACOUR & JABOUILLE, 192; Tonkin, KINNEAR, 449; KURODA, 468; Yunnan, LA TOUCHE, 485; Southern China, BANGS, 46; MELL, 587; STRESEMANN, 844; Formosa, KURODA, 469.

AUSTRALIAN REGION.

Celebes.—NEUMANN, 628; STRESEMANN, 841.

New Guinea and dependent Islands.—Buru, HARTERT, 348, 353; Lombok, Sumba, Kei Is., HARTERT, 353; Flores, Djampea, HARTERT, 349; Aru Is., KINNEAR, 447; Mysol, NEUMANN, 628; New Guinea, LAUBMANN, 489; NEUMANN, 628; STRESEMANN, 829; New Ireland, NEUMANN, 628; ROTHSCHILD & HARTERT, 739; ROTHSCHILD, 737; New Hanover, HARTERT, 350; Squally I., HARTERT, 352; St., Matthias I., HARTERT, 351; ROTHSCHILD & HARTERT, 738; Admiralty Is., HARTERT, 349; Solomon Is., HARTERT, 344.

Australian Commonwealth.—Australia, ASHBY, 21; CHISHOLM, 156; MATHEWS, 567, 568, 570; Western Australia, T. CARTER, 137; South Australia, ASHBY, 23; CLELAND, 164; KINGHORN & IREDALE, 446; MORGAN, 609; NICHOLLS, 633; SUTTON, 864; TROUGHTON, 910; WEIDENBACH, 932; WHITLOCK, 950; Victoria, HOWE, 396; New South Wales, ASHBY, 25; CHISHOLM, 157; EDWARDS, 224; KINGHORN, 445; WOLSTENHOLME, 970; Queensland, CHENERY, 155; KINNEAR, 447; MACGILLIVRAY, 551; MATHEWS, 569; TODD, 904; Tasmania, FLETCHER, 248, 249; GIBLIN, 286; HALL, 332; LORD & SCOTT, 534; MCGILP & PARSONS, 552; SHARLAND, 791.

New Zealand.—FALLA, 234; MONCRIEFF, 606; SLADDEN, 800; STONER, 822; WILKINSON, 955; Chatham Is., ARCHEY & LINDSAY, 16.

Pacific Islands.—MURPHY, 618; Fiji Is., STONER, 822; WOOD, 971, 974; Hawaiian Is., WETMORE, 940.

NEOTROPICAL REGION.

General.—CHAPMAN, 144, 145, 146, 147; CHAPMAN & GRISCOM, 149; HELLMAYR, 367; TODD, 905.

South America.—Argentina, ARRIBALZAGA, 19; DAGUERRE, 182; DINELLI, 202; MARELLI, 563; REED, 695; WETMORE, 938; WETMORE & PETERS, 942; WILSON, 957; Paraguay, BERTONI, 84; Chile, BARROS, 57, 58; CONOVER, 171; HELLMAYR, 366; LATASTE, 480; REED, 696; STRESEMANN, 842, 843; Peru, ZIMMER, 988; Ecuador, BERLIOZ, 83; Brazil, MIRANDA-RIBEIRO, 596; SNETHLAGE, 803, 804; VELHO, 919, 920, 921; Surinam, PENARD, 665; British Guiana, CLEARE, 163; HAVILLAND, 356; Venezuela, HELLMAYR, 365.

Central America.—Panama, GRISCOM, 306; HALLINAN, 333; Costa Rica, BANGS & PENARD, 47; DWIGHT & GRISCOM, 218; GRISCOM, 306.

West Indies.—Gonave I., Haiti, RICHMOND & BRADSHAW, 705; San Domingo, KAEMPFER, 432; Cuba, PEARSON, 660.

Antarctic Islands.—Falkland Is., BENNETT, 72; VALLENTIN, 915; South Shetlands, FLEMING, 247.

Galapagos Is.—BEEBE, 69; W. O. DAWSON, 189.

NEARCTIC REGION.

(Including Mexico.)

General.—BLAAUW, 90; HELLMAYR, 367; LINCOLN, 510; NICHOLS, 634; OBERHOLSER, 637; PEARSON, 661.

Mexico.—Todos Santos Is., DENBURGH, 194.

Western United States.—California, W. L. DAWSON, 188; DICKEY & VAN ROSSEM, 200, 201; GRINNELL, 303, 304; GRINNELL & STORER, 305; MAILLIARD, 559; RICHARDS, 704; ROSS, 733; VAN ROSSEM, 734; Arizona, F. M. BAILEY, 35; Oregon, GABRIELSON, 254; PHILL, 687; SWARTH, 869; WALKER, 926; New Mexico, JENSEN, 417; Colorado, BERGTOLD, 81.

Middle United States.—Texas, BENT, **80**; LAUBENFELS, **486**; PEARSON, **659**; Oklahoma, NICE, **631, 632**; Arkansas, PINDAR, **679**; WHEELER, **943**; Missouri, NEFF, **626**; Alabama, HOWELL, **397**; Iowa, FENTON, **240**; N. Dakota, GABRIELSON & JEWETT, **256**; WOODRUFF, **977**; Michigan, KOELZ, **458**; LEOPOLD, **503**; VAN TYNE, **917**; Kentucky, BLINCOE, **92**; G. WILSON, **959**; Tennessee, GARNIER, **258, 259.**

Eastern United States.—Florida, LONGSTREET, **519**; S. Carolina, SPRUNT, **811**; Virginia, TODD, **902**; Pennsylvania, BURLEIGH, **127, 128**; New York, BICKNELL, **88**; Massachusetts, G. ALEXANDER, **3**; EATON, **220**; Maine, BREWSTER, **111.**

Canada.—Quebec, H. F. LEWIS, **508**; MOUSLEY, **611, 612**; TERRILL, **886**; Ontario, DE LURY, **193**; GORMLEY, **299**; LLOYD, **515**; MCKEOUGH, **554**; PREECE, **686**; W. E. SAUNDERS, **749, 750**; Manitoba, PITTMANN, **680**; Saskatchewan, MITCHELL, **597**; Alberta, FARLEY, **235**; HENDERSON, **371**; British Columbia, MUNRO, **615, 616**; SWARTH, **870.**

Alaska.—A. M. BAILEY, **34**; MURIE, **617.**

THE OCEANS.

Atlantic.—DABBENE, **180**; JESPERSEN, **419**; LOWE, **538.**

Pacific.—LOWE, **538.**

FOSSIL BIRDS.

Cretaceous-Eocene. — Patagonia, IHERING, **409.**

Oligocene.—S. Dakota, SINCLAIR, **798.**

Tertiary (? Miocene).—Mongolia, SCHLOSSER, **765.**

Pliocene.—France, STEHLIN, **814**; Arizona, WETMORE, **941.**

Pleistocene and Post-Tertiary.—Checko-Slovakia, ŽELIZKO, **987**; U.S.A., L. MILLER, **591, 592.**

III.—SYSTEMATIC.

The arrangement in Sharpe's "Hand-list of Birds" is here used; where the generic names differ, that in the Hand-list is prefixed in square brackets.

Full references are given only in the case of new genera and species. In other cases the numeral in Clarendon refers to the List of Titles, where the full reference will be found.

ORDER STRUTHIONIFORMES.

Choroid plexus in Ratite Birds, COUPIN **175.**

Struthio structure of the gizzard-lining, DUERDEN & BROCK **212.**

†*Struthiolithus chersonensis* list of the eggs found in China and Mongolia, ANDERSON **13.**

ORDER CASUARIIFORMES.

Dromaeus novaehollandiae breeding habits, HEINROTH **364.**

†*Dromaeus minor* a note on some recently obtained bones from King I. and Tasmania, SCOTT **787.**

ORDER DINORNITHIFORMES.

†*Dinornis*, bones found near Auckland, BARTUM **62.**

ORDER TINAMIFORMES.

Crypturus boucardi costaricensis **subsp. n.** Costa Rica, DWIGHT & GRISCOM Amer. Mus. Nov. **142** p. 1.

Nothoprocta perdicaria sanborni **subsp. n.** S. Chile, CONOVER Auk **1924** p. 334.

ORDER GALLIFORMES.

Pheasants in aviculture, BEEVER **70.**

Megapodius duperreyii eremita on New Hanover p. 195, HARTERT **350.**—*M. forsteni balukensis* **subsp. n.** Baluk I. Sulu sea, OBERHOLSER J. Wash. Acad. **14** p. 294.

Penelope obscura taxonomic note p. 241, MIRANDA-RIBEIRO **596.**

Lagopus lagopus investigation of the gizzard grit in Norway and Iceland KOLDERUP **460**.—*L. lagopus alexandrae* in N. Bt. Columbia p. 331, *L. rupestris* subsp. ? tail figured p. 333, SWARTH **870**.—*L. lagopus* and *L. mutus* food in Norway, HOLMBOE **388**.—*L. mutus* field notes, HOLM **386**.—*L. m. kurilensis* Kurile Is., KURODA Bul. B.O.C. **45** p. 15.—*L. m. hyperboreus* observations in Spitsbergen p. 494, LONGSTAFF **518**.

Lyrurus tetrix britannicus distribution in Great Britain, GLADSTONE **290**.

Tetrao urogallus weight as a subspecific character, ZEDLITZ **985**.—*T. u. karelicus* **sp. n.** Finland, LÖNNBERG Fauna och Flora **1924** p. 68.

Tetrastes sewerzowi young plumage p. 1, JACOBI **414**.

Tetraogallus Indian species and races monographed with col. pl., *T. himalayensis* p. 1., BAKER **42**.

[*Caccabis*] *Alectoris rufa* race in Majorca discussed p. 525, JORDANS **422**; incubation habits, PORTAL **684**.—*A. graeca saxatilis* distr. in the French Alps, LAVAUDEN **497**.—*A. barbara* × *A. graeca* hybrid described, MOLTONI **603**.—*A. melanocephala* notice with coloured figure p. 642 pl. 26, R. MEINERTZHAGEN **583**.

Francolinus hubbardi, *F. hildebrandti* figured pp. 13, 15 pls. 1, 2, MENEGAUX **588**.—*F. streptophorus* ranging to Tanganyika Territory, GRANT **301**.—*F. bicalcaratus ogilvie-granti* addt. descript. p. 209, BATES & BANNERMAN **63**.—*F. nobilis* on Kivu volcanoes, addt. information p. 317, GYLDENSTOLPE **321**.—*Dendroperdix sephaena zuluensis* Zululand, *D. s. thompsoni* S.W. Afr. Prot. **subspp. n.**, A. ROBERTS Ann. Transvaal Mus. **10** p. 78.

Perdix perdix the variation "*damascena*," VALLOT **916**.—*P. montana* a mutant variation, STRESSEMANN **852**.

[*Microperdix*] *Cryptoplectron* Indian species and races monographed with col. pl. of *C. erythrorhynchus* p. 849. BAKER **42**.

Arboricola orientalis sumatrana, *A. o. orientalis* col. pl. vi p. 204, ROBINSON & KLOSS **726**.—*Arborophila rubirostris* call-note and descript. of chick p. 202, ROBINSON & KLOSS **726**.

Tropicoperdix merlini Annam p. 28, *T. cognacqi* Cambodia p. 29, **spp. n.**, DELACOUR & JABOUILLE Bul. B.O.C. **45**.

Caloperdix oculea sumatrana, *C. o. oculea* col. pl. vii p. 204, ROBINSON & KLOSS **726**.

Coturnix c. japonica is the only race of the species in E. Asia; distinction from typical form, KURODA **467**.

Bambusicola fytchii on Yunnan examples p. 297, LA TOUCHE **485**.

[*Gennaeus*] *Hierophasis dissimilis* a mutant of *H. swinhoei* further notes and col. pl., GHIGI **280**.—*H. imperialis* **sp. n.** Annam, DELACOUR & JABOUILLE Bul. B.O.C. **45** p. 29.

Phasianus colchicus on the races in Kansu and Shansi, LÖNNBERG **531**.—*P. c. rothschildi* addt. information on Yunnan bird p. 298, LA TOUCHE **485**.—*P. c. torquatus* early record in Silesia, STRESEMANN **855**

Gallus "*dom.*" early history, STRESEMANN **847**; discussion of the Chilean blue-egg-laying race, PRADO **685**; on feral Jungle-fowls in South Sea Islds., MURPHY **618**; structure of the pecten, MANN **561**; hybridization experiments and genetics, LOTSY & KUIPER **535**; causes of variation in eggs, SCHJELDRUP-ELBE **762**; A monster chicken, JAQUET **415**; Double monster, LATASTE **478**.

Polyplectron chinquis ghigii **subsp. n.**, Annam, DELACOUR & JABOUILLE Bul. B.O.C. **45** p. 30.—*P. chalcurum* field notes and descript. of chick p. 206, ROBINSON & KLOSS **726**.

Rheinardius ocellatus and the Chinese Phoenix, HACHISUKA **325**.

Numida papillosa limpopoensis **subsp. n.** Pietersburg Tr., A. ROBERTS Ann. Transvaal Mus. **10** p. 77.

†*Agriocharis* Pliocene fossil metatarsal described and figured p. 8 fig. 5, WETMORE **941**.

Lophortyx californica acclimatized in Chile, REED **696**.

ORDER TURNICIFORMES.

Turnix pugnax distinctive characters p. 208, ROBINSON & KLOSS **726**.

ORDER COLUMBIFORMES.

Sphenocercus apicaudus lowei **subsp. n.** Annam, DELACOUR & JABOUILLE Bul. B.O.C. **45** p. 31.—*S. sphenurus yunnanensis* addt. descript. p. 296, LA TOUCHE **485.**

[*Vinago*] *Treron calva* and *T. wakefieldi* are closely allied, GROTE **316.**—*T. calva vylderi* **subsp. n.** Gt. Namaqualand, GYLDENSTOLPE Bul. B.O.C. **44** p. 36.—*T. c. granviki* **subsp. n.** Victoria Nyanza and review of other races, GROTE J. Orn. 1924 p. 102.

Butreron capellei messopora S.E. Borneo p. 299, *B. c. panochra* E. Sumatra p. 300, **subspp. n.,** OBERHOLSER J. Wash. Acad. Sci **14.**

[*Osmotreron*] *Treron curvirostra erimacra* **subsp. n.** Balabac P.I., OBERHOLSER J. Wash. Acad. **14** p. 297.—*Dendrophassa vernans nesophasma* Mindanao P.I. p. 297, *D. v. abbotti* L. Siam, *D. v. zalepta* Celebes, *D. olax arismicra* N.E. Borneo p. 298, **subspp. n.,** OBERHOLSER J. Wash. Acad. **14.**

Ptilopus dupetithouarsi viridior **subsp. n.** Marquesas Is. p. 4 with taxonomic notes on other South Sea Island species, MURPHY Amer. Mus. Nov. no. **115**; *P. chalcurus* redescription from Tuamotu group with taxonomic notes and figure id ibid no. **124 p. 1.**

Thyliphaps **gen. n.** for type *Ptilinopus huttoni* Finsch rediscovered, MURPHY Amer. Mus. Nov. no. **115** p. 7.

[*Oedirhinus*] *Ptilinopus insolitus* type locality New Ireland not New Caledonia p. 197, HARTERT **350.**

[*Thoracotreron*] *Ptilinopus solomonensis johannis* St. Matthias I and further distr.; *P. insolitus inferior* **subsp. n.** St. Matthias I., HARTERT Nov. Zool. **1924** p. 265.

[*Spilotreron*] *Haemataema melanocephala enantia* **subsp. n.** Sulu I., OBERHOLSER J. Wash. Acad. **14** p. 296.

Chrysaena luteovirens observations in Fiji, WOOD **974.**

Globicera pacifica the structure of the gizzard, WOOD **972.**—*G. auroræ* plumage changes i p. 8, MURPHY **618.**

[*Carpophaga*] *Muscadivores aeneus arhadius* **subsp. n.** E. Sumatra, OBERHOLSER J. Wash. Acad. **14** p. 296.—*Ducula rhodinolaema* and *D. vanwycki* status and distribution p. 196, HARTERT **350.**

Hemiphaga chathamensis present and past status p. 196, ARCHEY & LINDSAY **16.**

Columba œnas status in Rhineland, GEYR **276.**—*C.* "*dom.*" the determination of the sex even when young, IWATA **413.**—*C. arquatrix* taxonomy and races discussed p. 204, GYLDENSTOLPE **321.**

†[*Columba*] *Chloroenas micula* **sp. n.** Pliocene Arizona Wetmore P.U. S. N. Mus. **64** art. 5 p. 13 figs. 8–9.

Macropygia rufa goodsoni **subsp. n.** St. Matthias I., HARTERT Nov. Zool. **1924** p. 266.

[*Turtur*] *Streptopelia turtur turtur* nesting notes in Glamorgan, INGRAM & SALMON **410.**—*S. t. loëi* **subsp. n.** Majorca, JORDANS J. Orn. **1924** p. 527.—*S. lugens hypopyrrhus* p. 206, BATES & BANNERMAN **63.**

Streptopelia semitorquata erythrophrys taxonomy and races p. 308, GYLDENSTOLPE **321.**—*S. roseogrisea roseogrisea* and *S. decipiens shelleyi* distribution and taxonomy p. 207, BATES & BANNERMAN **63.**

[*Spilopelia*] *Streptopelia chinensis* in Shansi p. 327, LÖNNBERG **531.**—*S. c. frigoris* **subsp. n.** Shantung N. China, STRESEMANN Abh. Ber. Mus. Dresden **16** no. 2 p. 67.

[*Geopelia*] *Œnopopelia humilis* nest and eggs in Luzon, MCGREGOR **553.**

Gymopelia ceciliaa obsoleta **subsp. n.** Peru, ZIMMER Field Mus. Publ. **12** p. 51.

Chamaepelia minuta breeding in captivity, BRIGHT **113.**

Chalcophaps stephani stephani on St. Matthias I., *C. s. wallacei* of Celebes is distinct p. 266, HARTERT **351.**

Haplopelia simplex inornata range p. 205, BATES & BANNERMAN **63.**

[*Phlogoenas*] *Gallicolumba beccarii eichhorni* **subsp. n.** St. Matthias I, HARTERT Nov. Zool. **1924** p. 266.—*G. erythroptera* (Gm.) and *G. rubescens* (Vieill.) redescribed from recently obtained specimens i. pp. 8, 10, MURPHY **618.**

ORDER OPISTHOCOMIFORMES.

Opisthocomus hoazin field observations in Guiana, HAVILLAND **356.**

ORDER RALLIFORMES.

Hypotaenidia striata paraterma **subsp. n.** Samar, P.I., OBERHOLSER J. Wash. Acad. **14** p. 295.—*H. philippensis lesouefi* in New Hanover, distr. etct. p. 195, HARTERT **350.**—*H. p. goodsoni* remarks and plumage of nestling no. ii p. 3, MURPHY **618.**

[*Rallina*] *Eulabeornis t. tricolor* on St. Matthias I. and list of races p. 262, HARTERT **351.**

Atlantisia rogersi addt. information p. 95, STENHOUSE **816.**

[*Zapornia*] *Porzana parva* field notes, Pomerania, ROBLEN **729.**

Porzana cinerea meeki **subsp. n.** St. Matthias I., HARTERT Nov. Zool. **1924** p. 263.—*Porzanoidea tabuensis* measurements plumage of nestling no. ii p. 4, MURPHY **618.**

Nesophylax **gen. n.** for type *Porzana atra* North with remarks on the species, MURPHY Amer. Mus. Nov. no. **124** p. 5.

Sarothrura pulchra tibatiensis addt. description p. 208, BATES & BANNERMAN **63.**

Amaurornis phoenicura supposed racial characters p. 509 C. B. TICEHURST **892**; nesting in captivity, SHORE-BAILY **796.**

Gallinula chloropus cachinnans is the Californian bird, DICKEY & VAN ROSSEM **201.**

[*Porphyriola*] *Porphyrula alleni* recorded on Ascension, LOWE **537.**—*Porphyrio martinicus* obtained on Tristan d'Acunha p. 96, STENHOUSE **816.**—*Ionornis martinica* recorded at Tristan d'Acunha, LOWE **537.**

Porphyrio calvus note on subspecies p. 214, ROBINSON & KLOSS **726.**—*P. melanotus* in Buru nomenclature and races discussed p. 105, HARTERT **348.**—*P. m. samoensis* distinctness maintained ii p. 7, MURPHY **618.**

Fulica atra status in Sind p. 507, C. B. TICEHURST **892**; nr. Asben most southern recorded locality p. 7, HARTERT **347.**—*F. a. australis* new to Buru p. 108, HARTERT **348.**

Podica senegalensis albipectus **subsp. n.** Loango and discussion of other forms, STRESEMANN J. Orn. **1924** p. 96.

Heliopais personata nests and eggs, MARLOW **565.**

ORDER PODICIPEDIFORMES.

Diving habits of Grebes, TOWNSEND **906.**

Food and economics of N. American Grebes, WETMORE **939.**

[*Proctopus*] *Podiceps nigricollis* voice, HEYDER **378.**

[*Lophaethyia*] *Podiceps c. cristatus* courtship studies, HUXLEY **403.**

ORDER COLYMBIFORMES.

Diving habits of Loons, TOWNSEND **906.**

Colymbus arcticus arcticus nesting and other habits in Sweden, ZEDLITZ **984.**—*C. immer* on Spitsbergen mainland p. 484, LONGSTAFF **518.**

ORDER SPHENISCIFORMES.

Aptenodytes patagonica moult and breeding habits, T. H. GILLESPIE **289.**

Pygoscelis papua breeding notes, S. Georgia, SZIELASKO **875.**

ORDER PROCELLARIIFORMES.

Review of the Petrels of the southern Atlantic, DABBENE **180.**

The migration and habits of the Shearwaters of Sagami Bay, Japan, MATSUDAIRA **571.**

The flight of the Albatross, IDRAC **406, 407.**

Oceanodroma leucorhoa song, TOWNSEND **907.**—*O. castro* in Mecklenburg, new to Germany, CLODIUS **166.**—*O. monorhis* recorded nr. Singapore, CHASEN **151.**—*O. hornbyi* found in a nitrate field in Chile at elevation of 1,600 metres, STRESEMANN **842.**

Pelagodroma marina hypoleuca eggs and nestlings p. 233, MURPHY **619.**

Fregetta lineata p. 7, *F. grallana* p. 9 rediscriptions and measurements ii, MURPHY **618.**—*Nesofregetta albigularis* measurements nestling plumage and fig. of foot ii p. 11, MURPHY 618.

Puffinus identification of the species obtained by Loche in Algeria in 1840–2, MOLTONI **601**.—*P. chlororhynchus* taxonomic note, LOOMIS **533**.—*Calonectris kuhli edwardsi* measurements variation breeding habits, eggs, etct. fig. 8 p. 242, MURPHY **619**.—*P. griseus* breeding in Chile, STRESEMANN **843**.—*P. tenuirostris* breeding and other habits, F. LEWIS **507**.—*P. bulleri* breeding on Poor Knights Island, N.Z., eggs and nest described, FALLA **234**.

Priocella antarctica distrib. and synonymy, DABBENE **181**.

[*Majaqueus*] *Procellaria solandri*, *P. neglecta* taxonomic notes, LOOMIS **533**.

[*Oestrelata*] *Pterodroma dubius* **nom. n.** North Australia, MATHEWS Bul. B.O.C. **44** p. 70.

Fulmarus glacialis the extension of the breeding range in recent years, FAXEN **236**; first breeding record in Norway, JOHNSEN **421**; in Bohemia and Styria, MICHEL & REISER **589**; first record for Ontario, GORMLEY **299**; courting and display, BOASE **93**.

[*Prion*] *Pachyptila turtur* breeding notes on Chatham Is., also nestling plumage, p. 189, ARCHEY & LINDSAY **16**.

ORDER ALCIFORMES.

Fratercula a. arctica nesting notes on Puffin Isld., Anglesey, HEWITT **377**.

ORDER LARIFORMES.

Distribution of Pleistocene Gulls in western U.S.A., L. MILLER **591**.

Albino Gulls, STRESEMANN **857**.

Hydrochelidon nigra observed transporting young with bill, GUÉRIN **319**.

Gelochelidon nilotica cloatesi **nom. n.** Pt. Cloates W. Australia, MATHEWS Bul. B.O.C. **45** p. 41.

Sterna anaetheta fuligula nesting in the Red Sea, C. B. TICEHURST **893**.—*S. albifrons saundersi* distribution, status, nesting, etct. in Sind p. 143, C. B. TICEHURST **892**.

Larus minutus, breeding in East Prussia, DOBBRICK **208**.—*L. ridibundus*, migration routes, PEDERSEN **663**.—*L. hemprichii* moults and plumage-changes p. 637, R. MEINERTZHAGEN **583**; p. 499, C. B. TICEHURST **892**.—*L. dominicanus austrinus* **subsp. n.** South Shetlands, FLEMING Proc. Biol. Soc. **37** p. 139.—*L. fuscus* the Swedish races discussed, LÖNNBERG **529**.—*L. fuscus taimyrensis* distinctive characters p. 496, *L. genei* habits p. 498, C. B. TICEHURST **892**.—*L. argentatus michahellesii* nesting in Str. of Gibraltar p. 91, LYNES **548**.—*L. argentatus*, *L. f. affinis* migrations by the marking method, THOMSON **888**.

Pagophila eburnea observations on Spitsbergen p. 489, LONGSTAFF **518**.

Stercorarius the three species occurring in Sicilian waters, TRISCHITTA **909**.—*L. pomarinus* in the Gulf of Suez, R. MEINERTZHAGEN **584**.

ORDER CHARADRIIFORMES.

Bibliography, classification and lists of genera species, etct., LOW **536**.

British Waders with 51 coloured plates, ARNOLD **18**.

Vanellus cristatus development of the heart, FUCHS **253**; Ooporhyrin in the egg-shells, FISCHER & KÖGL **245**.

Stephanibyx coronatus and *S. melanopterus* nest habits p. 761 pl. 30, PAGET-WILKES **653**.

Titihoia **subg. n.** for *Stephanibyx melanopterus* (Cretsch.), A. ROBERTS Ann. Transvaal Mus. **10** p. 79.

Charadrius apricarius nomenclature of subspecies, LÖNNBERG **532**.—*C. a. oreophilus* occurring in Sweden with discussion of nomenclature and taxonomy, LÖNNBERG **526**.

Aphriza virgata nesting habits in Alaska, Murie **617**.

[*Ochthodromus*] *Charadrius mongolus atrifrons* first authentic eggs described from Lahul Himalaya, BAKER **38**.

[*Oxyechus*] *Charadrius t. tricollaris* in Cameroon p. 208, BATES & BANNERMAN **63**.

[*Aegialitis*] *Charadrius dubius* on the race breeding near Biskra, JOURDAIN **427**.—*C. d. curonicus* nesting in Holland, PELLINKHOF **664**.—*C. dubius curonicus*, *C. a. alexandrinus* status in Majorca p. 531, JORDANS **422**.

†*Micropalama hesternus* **sp. n.** Pliocene Arizona, WETMORE P. U. S. N. Mus. **64** art. 5 p. 11 figs. 6, 7.

Totanus totanus eurhinus a good race p. 120, *T. stagnatilis* recorded from Sind p. 122, C. B. TICEHURST **892**.

[*Heteractitis*] *Heteroscelus incanus* nesting notes in Alaska, MURIE **617**.

[*Tringoides*] *Tringa hypoleucos* recorded breeding in Holland, OOMEN **647**; *Actitis hypoleuca* breeding in Denmark, PEDERSEN **662**.

[*Pavoncella*] *Machetes pugnax* courting habits in confinement, MOFFAT **599**.

[*Limonitis*] *Pisobia ruficollis* in Alaska new to N. America, A. M. BAILEY **34**.—*Erolia subruficollis* captured in Dep. Finistère, HÉMERY **369**.

[*Ancylochilus*] *Erolia ferruginea* in Sind in summer p. 112, C. B. TICEHURST **892**.

[*Tringa*] *Calidris tenuirostris* in Alaska new to N. America, A. M. BAILEY **34**.

[*Pelidna*] *Erolia alpina* note on races p. 111, C. B. TICEHURST **892**.

[*Gallinago*] *Capella gallinago* nesting in Portugal, WITHERBY **967**.—*C. g. delicata* killed in S. Uist first record for Europe and on the distinctions between the American and European races, R. MEINERTZHAGEN **580**; WITHERBY **962**; nesting notes in Pennsylvania, G. M. SUTTON **865**; "drumming" and its cause, HOFFMAN **381**.—*G. major* still a rare breeding bird in Denmark, BARFOD **56**.

Scolopax rusticola migration and weather, WEIGOLD **934**; migration routes and their causes in Europe, SCHENK **756**; immigration in Norfolk in winter, RIVIERE **719**.—a Heligoland-ringed individual shot in Co. Tyrone, STENDALL **815**; spring migration through Denmark in 1924, KLINGE **454**; history of increase of breeding range in Scotland, BAXTER & RINTOUL **67**.—*S. s. saturata* field notes p. 216 ROBINSON & KLOSS **726**.

[*Crymophilus*] *Phalaropus fulicarius* in S. W. Afr. Protectorate, A. ROBERTS **723**.

Phalaropus lobatus on the Arabian and Mekran coasts in winter p. 126, C. B. TICEHURST **892**; luteal cells in ovary, YOCOM **980**.

Cursorius cursor note on a British-killed example, ROTHSCHILD **736**.

Stiltia isabella nesting and other habits, MACGILLIVRAY **550**.

[*Oedicnemus*] *Burhinus* review of species and races with keys, descriptions and distribution, A. C. MEINERTZHAGEN **576**.

Otis tarda status in S. Moravia, ZDOBNITZKY **983**.

Lissotis nuba in French Sahara p. 9, HARTERT **347**.

Houbara macqueenii nr. Port Sudan, C. B. TICEHURST **893**; *Chlamydotis undulata macqueenii* in Mongolia p. 63, WILDER **953**.

ORDER GRUIFORMES.

Anthropoides virgo in Norfolk, RIVIERE **717**.

Mesoenas variegata on the anatomy and systematic position and the possibility of a second species, *M. unicolor* Des Murs, LOWE **540**.

Monias benschi a preliminary note on anatomy and relationships, LOWE **540**.

Cariama cristata early plumage-development, HEINROTH **362**.

ORDER STEREORNITHES.

†*Phororhacos* and other birds' remains from Cretaceous-Eocene beds of Patagonia p. 288, IHERING **409**.

ORDER ARDEIFORMES.

The Herons of the United States with 4 plates in colour, PEARSON **661**.

Comatibis eremita distr. habits and breeding place in Algeria, BALSAC **45**.

[*Hagedashia*] *Theristicus hagedash* nesting notes in Natal, SYMONS **871**.

Ciconia ciconia asiatica migrating across Tian Shan Mts., ALMÁSY **10**.

Leptoptilus crumeniferus first record for Cameroon p. 210, BATES & BANNERMAN **63**.

[*Pyrrherodias*] *Ardea purpurea* a nest in the Camargue S. France, GIBERT **285**.

Ardea cinerea Belgian heronries, DUPOND **216**; display and nesting habits, HUXLEY **404**.

[*Mesophoyx*] *Herodias intermedia* the heronry at Mengtsz, Yunnan p. 304, La Touche **485**.

Nycticorax n. nycticorax in Denmark, Scheel **754**; status in S. Moravia, Zdobnitzky **983**.—*N. caledonicus mandibularis* note on races p. 199, Hartert **350**.

Butorides javanica carcinophonus E. Borneo, *B. j. carcinophilus* Luzon, **subspp. n.**, Oberholser J. Wash. Acad. **14** p. 294.

[*Ardetta*] *Ixobrychus minutus* in parks and frequented places, Schnurre **768**. —*L. exilis hesperis* **subsp. n.** California Dickey & van Rossem Bul. S. Cal. Acad. Sci. **23** p. 11.

ORDER PHOENICOPTERIFORMES.

Phoenicopterus ruber in Cuba, Pearson **660**.—*P. roseus* in Switzerland, Poncy **683**; in Poland, Sztolcman **876**; *P. r. antiquorum* nesting notes from the Rhône Delta, Glegg **293**.

ORDER ANSERIFORMES.

Monograph of the Ducks vol. ii, with many plates and maps, Phillips **678**.

The Anatidae of the World, Finn **243**.

Ducks on the Tring reservoirs, Herts., Oldham **642**.

The Ducks of Colorado, Bergtold **81**.

Nesting of Nyasaland Ducks, C. C. Roberts **724**.

The plumage-changes and migrations of Scandanavian Ducks, Schiøler **761**.

On the copulatory organs of certain Ducks, Ghigi **282**.

Cygnus bewickii in East Prussia, La Baume **475**.—*Olor columbianus* in Ontario, W. E. Saunders **479**.—*C. olor* history in England, N. F. Ticehurst **897**.

Rhodonessa caryophyllacea approaching extinction with col. pl., Lönnberg **523**; Bucknill **121**.

[*Lampronessa*] *Aix sponsa* status and nesting habits in California, Dixon **203**.

Chen hyperboreus on Barra I. first Scottish record, W. E. Clarke **162**.

Anser erythropus field notes Sweden, Holm **387**.—*A. fabalis curtus* characters of the race in Kansu, Lönnberg **531**.—*A. segetum* life history, Holstein **389**.

Cygnopsis cygnoides × *Melanonyx fabalis serrirostris* a supposed hybrid fig., Kuroda **463**.

Branta bernicla on the two racial forms in northern Europe, Jourdain **425, 428**; *B. b. bernicla* and *B. b. hrota* Müller are the correct names of the dark and light-breasted birds, Lönnberg **520**.—*B. b. bernicla* does not occur in Japan, Hachisuka **326**.

†*Branta dickeyi* **sp. n.** Pleistocene, California, L. Miller Condor **26** p. 178.—*B. minuscula* **sp. n.** Pliocene Arizona, Wetmore P. U. S. N. Mus. **64** art. 5 p. 6 2 figs.

†*Dendrocygna eversa* **sp. n.** Pliocene Arizona, Wetmore P. U. S. N. Mus. **64** art. 5 p. 3 2 figs.

Pseudotadorna cristata remarks as to its supposed hybrid origin, Hachisuka **323**; on an additional specimen with coloured plate and figs., Kuroda **472**.

Anas platyrhynchos wintering in Alberta, Farley **235**; sexual relations, Geyr **273**.

Mareca americana taken in Holland, Eykmann **230**.

Nettion formosum in Alaska new to N. America, A. M. Bailey **34**; *Anas formosa* another example in Holland, Eykman **231**.

Dafila a. acuta in Alaska new to N. America, A. M. Bailey **34**.—*D. a tzitzihoa* migrations in U.S.A., Lincoln **511**.

Netta rufina nesting notes from the Rhône Delta, Glegg **292**.

[*Aythya*] *Nyroca americana* not a race of *N. ferina* which is closer to *N. valisneria*, Brooks **116**.

Tachyeres patachonicus and *T. cinereus* on the distinctions, Bennett **72**.

[*Clangula*] *Bucephala c. clangula* courting display, Boase **94**.

Oidemia fusca obtained nr. Valencia, Spain, Pardo **657**; *Melanitta fusca* doubtful breeding record in Scotland, Witherby **965**.

Somateria m. mollissima in Italy, Moltoni **602**.

Erismatura leucocephala in Silesia, KAYSER **443.**

Mergus albellus breeding in Lappland, LÖNNBERG **528.**

[*Merganser*] *Mergus m. merganser* nesting and other habits in Sweden, ZEDLITZ **984.**

ORDER PELECANIFORMES.

Phalacrocorax graculus in Rhine Prov., JORDANS **423.**—*P. carunculatus onslowi* colour of soft parts of young bird p. 192 ARCHEY & LINDSAY **16.**—*P. pygmaeus* in Sicilian waters, TRISCHITTA **909.**

Sula bassana notes from Grassholm, Pembroke, ACLAND & SALMON **1.**—*S. leucogastra* habits, eggs etct. fig. 9 p. 251, MURPHY **619.**

Fregata a fresh revision of the genus p. 299, *F. minor mathewsi* Queensland p. 309, *F. ariel wilsoni* S. Trinidad I. p. 311 **subspp. n.,** LOWE Nov. Zool. Tring **1924**; on the species and races in Malayasia, CHASEN & KLOSS **153.**—*F. ariel* at Peitaiho, N. China, HUBBARD **398.**

Pelecanus erythrorhynchos range and migrations by banding, WARD, **928.**—*P. occidentalis* new nesting site in Florida, LONGSTREET **519.**

ORDER CATHARTIDIFORMES.

A monograph of the Birds of Prey Pt. 1 New World Vultures, SWANN **867.**

ORDER ACCIPITRIFORMES.

A monograph of the Birds of Prey Pt. 1, SWANN **867.**

Studies on the Accipitres, STRESEMANN **830.**

Food of Hungarian Hawks (small Mammals), GRESCHIK **302.**

Sagittarius serpentarius in Katanga SCHOUTEDEN **770.**

Neophron percnopterus recorded in East Prussia p. 113, TISCHLER **900.**

Circus macrourus breeding in Sweden LÖNNBERG **521.**—*C. aeruginosus* review of the group or "formenkreis," STRESEMANN **828.**—*C. ranivorus aequatorialis* Kenya Colony, *C. assimilis celebensis* Celebes, **subspp. n.,** STRESEMANN Orn. Monatsb. **1924** p. 48.

Accipiter [and *Astur*] a list of American species and subspecies p. 435, STRESEMANN **830.**

[*Astur*]*Accipiter gentilis* the incubation period, KUHK **465**; WELANDER **937.**—*A. g. gentilis* and *A. g. buteoides* in Germany in winter, STRESEMANN **851.**—*A. g. poecilopterus* critical remarks, LÖNNBERG **530**; *Falco palumbarius* on the right ovary and oviduct STIEVE **819, 820.**—*A. atricapillus* nesting notes in Alberta, HENDERSON **370.**—*Accipiter castanilius* a distinct species addt. information, STRESEMANN **833.**—*A. hiogaster pallidiceps* second known example p. 108, HARTERT **348.**—*A. meyerianus* and *A. planes* their relationships discussed p. 442, STRESEMANN **830.**—*A. fasciatus*—*A. novaehollandiae* races and mutual relations p. 444, STRESEMANN **830.**

Accipiter nisus the female genital organs STIEVE **82.**—*A. n. hibernicus* **subsp. n.** Ireland, SWANN Bul. B.O.C. **44** p. 79; also BANNERMAN & WITHERBY p. 93.—*A. minullus sassii* **subsp. n.** E. Belgian Congo, STRESEMANN Orn. Monatsb. **1924** p. 109.—*A. velox* nesting in Tennessee, GARNIER **259.**—*A. hilgerti* is a melanism of *A. ovampensis* p. 83, STRESEMANN **825.**—*A. ventralis* three phases p. 542, STRESEMANN **825.**—*A. melanolencus* two races discriminated in Africa, STRESEMANN **846.**

Buteo hypospodius and *B. poecilochrous* rearrangement and synonymy p. 438, STRESEMANN **830.**—*B. ferox* effects of injury to semicircular canals of ear, MOUQUET & GIRARD **610.**—*B. p. leucocephalus* in Tibet taxonomic note p. 61, STRESEMANN in JACOBI **414.**—*B. vulpinus intermedius* in Schleswig-Holstein, HAGEN **330.**—*B. buteo cirtensis* remarks p. 87, LYNES **548.**

Buteola brachyura nesting notes in Florida and dichromatism, BRANDT **107.**

Gypaëtus barbatus status in Transylvania, KAMNER **435.**

Uroaëtus audax nesting and other habits, GAUKRODGER **263.**

Aquila fulvescens on some remarkable examples, GUDE **318.**

Psammoaetus **gen. n.** for *Aquila nipalensis* which ranges to S.W. Afr. Prot., A. ROBERTS Ann. Transvaal Mus. **10** p. 79.

Afraetus **nom. n.** pro *Micraetus* preocc. type *Aquila wahlbergi*, A. ROBERTS Ann. Transvaal Mus. **10** p. 80.

[*Entolmaëtus*] *Hieraaëtus pennatus* review of the subspecies p. 432, STRESEMANN **830.**—*H. ayresii* and *H. spilogaster* relationships and distinctions, STRESEMANN **832.**

[*Lophotriorchis*] *Hieraaetus kieneri formosus* **subsp. n.** Malayan Islds., STRESEMANN Orn. Monatsb. **1924** p. 108.

Spizaëtus ornatus, *S. tyrannus* are quite distinct species p. 249.—*S. nipalensis* and *S. cirrhatus* review of the races p. 430, STRESEMANN **830.**—*S. africanus* characters and distrib., STRESEMANN **832.**—*Stephanoaetus coronatus* nest and eggs with photos p. 746, PAGET-WILKES **653.**—*Spizaetus cirrhatus limnaetus* dimorphism and nesting habits p. 225, ROBINSON & KLOSS **726.**—*S. c. limnaetus* and *S. c. kelaarti* habits and occurrence in Java, BARTELS **60.**

Circaëtus rearrangement of the African species, STRESEMANN **853.**

Haliaeetus leucocephalus nesting habits in Ohio and other field observations, HERRICK **373, 374, 375.**—*H. niger* on the example in the Marseilles Museum with plate, LAVAUDEN **494.**

Milvus ictinus recorded in Ireland. p. 103, BRAMBELL **103.**—*M. migrans* occurs in Sweden, LÖNNBERG **527.**—*M. m. arabicus* characters of race p. 632, R. MEINERTZHAGEN **583.**

Rostrhamus sociabilis feeding on the Gastropod *Ampullarius* in British Guiana, LANG **477.**

Pernis apivorus ranges to Kansu p. 320, LÖNNBERG **531.**

Microhierax fringillarius field notes in Sumatra p. 224, ROBINSON & KLOSS **726**; nesting and other habits in Java p. 17, SPENNEMANN **810.**

Falco peregrinus brookei, *F. eleonorae* in Majorca p. 518, JORDANS **422.**—*F. deiroleucus* is a race of *F. peregrinus* and *F. albigularis* a race of *F. subbuteo* p.437, STRESEMANN **830.**—*F. severus papuanus* new to Buru p. 109, HARTERT **348.**—*F. columbarius columbarius*, *F. c. suckleyi* both in N. Bt. Columbia interrelations and distinctions p. 337, SWARTH **870.**

[*Hierofalco*] *Falco rusticolus obsoletus* status in Long Island, BICKNELL **88.**—*F. altaicus* plumages and systematic position, SUSKHIN **861.**—*F. cherrug milvipes* characters of a Mongolian bird p. 318, LÖNNBERG **531.**

Ieracidea berigora breeding association with the rat (*Leporillus*), TRAUGHTON **910.**

[*Cerchneis*] *Falco tinnunculus* physiology of vision, ROCHON-DUVIGNEAUD **731.**—*F. tinnunculus carlo* in Cameroon taxonomic remarks p. 211, BATES & BANNERMAN **63.**

ORDER STRIGIFORMES.

Food of Hungarian Owls (small Mammals), GRESCHIK **302.**

The Owl in Indian folk-lore, MODI **598.**

Asio otus or the voice, GEYR **274**; life history and economics, ALLEN **8.**—*A. flammeus* nuptial song-flight, DUBOIS **211.**

Bubo bubo jarlandi addt. information p. 292, LA TOUCHE **485.**—*B. b. desertorum* subspecies discussed, variations in paleness p. 16, HARTERT **347.**—*B. virginianus* haunts and habits, SHANKLAND **790.**

†*Bubo virginianus* variable dimensions of bones from Pleistocene deposits in California, HUSBAND **402.**

Huhua sumatrana nomenclature p. 226, ROBINSON & KLOSS **726.**

[*Scops*] *Otus scops scops* near Lubeck, HAGEN **331.**—*O. s. mallorcae* **subsp. n.** Majorca, JORDANS J. Orn. **1924** p. 407.—*O. bakkamoena hatchizionis* **subsp. n.** Seven Is., Japan, MOMIYAMA Dobuts. Zasshi **1923** p. 400.—*O. senegalensis* in N. Nigeria nomenclature and races p. 18, HARTERT **347.**—*O. asio* food-habits, NAUMAN **624.**

Strix uralensis pacifica **subsp. n.** Prov. Izu, Hondo p. 15, KURODA.—*S. leptogrammica nyctiphasma* **subsp. n.** Banjak Is. W. Sumatra, OBERHOLSER J. Wash. Acad. **14** p. 302.—*S. bartelsi* is a race of *S. leptogrammica* and list of other Malayan forms, STRESEMANN **849.**

Athene noctua Iraq races discussed p. 618, R. MEINERTZHAGEN **582.**—*A. n. solitudinis* **subsp. n.** Asben, HARTERT Nov. Zool. **31** p. 18.

Phodilus badius abbotti **subsp. n.** Malay. Pen., OBERHOLSER J. Wash. Acad. **14** p. 302.

Tyto alba erlangeri status of race at Aden p. 631, R. MEINERTZHAGEN **383.**—*T. a. kleinschmidti* **subsp. n.** Majorca, JORDANS J. Orn. **1924** p. 409.

ORDER PSITTACIFORMES.

Types in the Tring Museum p. 116, HARTERT **349.**

A search for the rarer Australian Parrots, CHISHOLM **156.**

Sexing Parrots by the pelvic bones, KNOBEL **457.**

[*Lorius*] *Domicella albidinucha* **sp. n.** New Ireland, ROTHSCHILD & HARTERT Bul. B.O.C. **45** p. 7.

Charmosyna atrata = melanistic *C. s. stellae* remarks p. 119, HARTERT **349.**

Neopsittacus musschenbroekii major **subsp.n.** eastern New Guinea, NEUMANN Orn. Monatsb. **1924** p. 38.

Callocephalon fimbriatum nesting notes in Victoria, HOWE **396.**

Cacatua roseicapilla habits in S. Austr. photos p. 48, NICHOLLS **633.**

Micropsitta finschii viridifrons addt. descript. and list of other races p. 202, HARTERT **350.**—*M. meeki proxima* **subsp. n.** St. Matthias I. nr. New Guinea, ROTHSCHILD & HARTERT Bul. B.O.C. **44** p. 50 and p. 267 **351.**

Amazona imperialis present status in Dominica, WOOD **973.**—*A. farinosa* with abnormally coloured tail, STRESEMANN **839.**

Poicephalus fuscicapillus (Verr. and Des Murs) name not valid p. 125, HARTERT **349.**

[*Eclectus*] *Lorius roratus goodsoni* **subsp. n.** Admiralty Is., HARTERT Nov. Zool. **1924** p. 123.

[*Geoffroyus*] *Pseudopsittacus maclennani* ≡ *G. geoffroyi maclennani* status p. 124, HARTERT **349.**

Prioniturus mada male described pp. 108, 125, HARTERT **348.**

Tanygnathus melanorhynchos floris Flores, *T. m. djampeae* Djampea I., **subspp. n.**, HARTERT Nov. Zool. **1924** p. 126.

Palaeornis derbiana in Tibet p. 34, STRESEMANN in JACOBI **414.**—*Psittacula krameri* subsp. ? near Cairo p. 772, HACHISUKA **324.**

Polytelis barrabandi × *P. alexandrae* hybrid with col. fig., ASTLEY **28.**

Pyrrhulopsis splendens heterochrosis, WOOD **976.**

Loriculus tener plumage characters and distrib. p. 201 HARTERT **350.**

Psephotus chrysopterygius, *P. dissimilis* are distinct forms, LE SOUEF & KINGHORN **506.**

[*Neophema*] *Neonanodes chrysogaster wallicus* **subsp. n.** New South Wales, MATHEWS Bul. B.O.C. **44** p. 70.

Melopsittacus undulatus colour variation, SETH-SMITH **789.**

Pezoporus vallicus nesting and other habits, GOGERLEY **296.**

Geopsittacus occidentalis nearly extinct in C. Australia notes with col. pl., WHITLOCK **950.**

ORDER CORACIIFORMES.

FAM. PODARGIDAE.

Batrachostomus poliolophus col. pl. viii p. 232, ROBINSON & KLOSS **726.**

FAM. LEPTOSOMATIDAE.

Leptosomus discolor a valuable insect-destroyer in Madagascar, MONNIER **607.**—*L. discolor intermedius* **subsp. n.** Comoro Is., HARTERT & NEUMANN Nov. Zool. **31** p. 116.

FAM. CORACIIDAE.

Types in the Tring Museum p. 115, HARTERT **349.**

Uratelornis chimaera a second example p. 116, HARTERT **349.**

Coracias cyanogaster in N. Nigeria p. 218, BATES & BANNERMAN, **63.**

FAM. ALCEDINIDAE.

Types in the Tring Museum p. 129, HARTERT **349.**

A list of generic names used for Kingfishers, LAUBMANN **491.**

A list of the Kingfishers of New Guinea, LAUBMANN **489.**

Review of the genera and subgenera allied to *Alcedo* with note on the generic position of *Halcyon leucogaster* Fras., *Megalcedo* type, *A. hercules* Laubm., *Cyanispida* type *A. coerulescens* Vieill., *Euryzonia* type *A. euryzonia* Temm., *Alcedoides* type *A. m. meninting* Horsf. p. 195, *Pseudalcedo* type *A. q. quadribrachys* Bp., *Caerulornis* type *A. semitorquata* Swains. p. 196 all **subgg. n.,** LAUBMANN Arch. Natg. **89** A Heft. 12.

Pelargopsioides **subg. n.** for *Pelargopis amauroptera* (Pears.), LAUBMANN Verh. Orn. Ges. Bayern **16** p. 137.

[*Ceryle*] *Streptoceryle alcyon* "territory," LINCOLN **513.**

Macroceryle **subg. n.** for *Ceryle lugubris* (Temm.), LAUBMANN Verh. Orn. Ges. Bayern **16** p. 136.

Alcedo attis structure of eye, KOLMER **461.**—*A. a. pelagica* status p. 203, HARTERT **350.**—*A. meninting* nomenclatural note p. 273, ROBINSON & KLOSS **727.**

Corythornis type of genus is *Alcedo nais* Kaup apud Gray 1849 nec Gray 1845, LAUBMANN **487.**—*C. c. johannae* **subsp. n.** Anjouan, Comoro Is., R. MEINERTZHAGEN Bul. B.O.C. **44** p. 44; = *C. c. cristata* Linn. as the type loc. of both is Anjouan or Johanna I., PETERS **667.**

Alcyone websteri addt. descript. and distr., *A. pusilla richardsi* taxonomy p. 204, HARTERT **350.**

Halcyon smyrnensis wing moult, LAUBMANN **492.**—*H. chelicuti eremogiton* validity confirmed p. 24, HARTERT **347.**—*H. senegalensis ranivorus* **subsp. n.** Pangani River Tanganyika Terr., R. MEINERTZHAGEN Bul. B.O.C. **44** p. 44.—*Sauropatis chloris cyanescens* on Karimata I., S.W. Borneo, OBERHOLSER **640.**—*Ramphalayon capensis* note on subspecies p. 233, ROBINSON & KLOSS **726.**—*R. c. arignota* **subsp. n.** S.E. Sumatra with notes on nomenclatural questions and a list of other races, OBERHOLSER Proc. Biol. Soc. **37** p. 136.—*H. albicilla saurophaga* on Squally I. note on races p. 277 HARTERT **352.**—*H. matthiae* addt. descript. p. 268, HARTERT **351.**

Todirhamphus gertrudae **sp. n.** Niau I. Tuamotu Group Pacific, MURPHY Amer. Mus. Nov. no. **149** 1924 p. 1, col. figure in "Natural History" **24** opp. p. 539.

Monachalcyon flavicans Gm 1788 antedates *M. monachus* 1850 with list of races, LAUBMANN **487.**

Tanysiptera nympha rothschildi **subsp. n.** Northern New Guinea, LAUBMANN Verh. Orn. Ges. Bayern **16** p. 26.

FAM. BUCEROTIDAE.

Types in the Tring Museum p. 114, HARTERT **349.**

[*Bucorax*] *Bucorvus abyssinicus* myology of fore limb, DERSCHEID **195.**

[*Authracoceros*] *Hydrocissa convexa barussensis* **subsp. n.** Tana Bala I., W. Sumatra, OBERHOLSER J. Wash. Acad. **14** p. 300.

Rhyticeros plicatus mendanae **subsp. n.** Solomon Is., HARTERT Bul. B.O.C. **45** p. 46.

Lophoceros jacksoni and *L. deckeni* are distinct species, ROTHSCHILD **735.**

Rhinoplax vigil field notes p. 238, ROBINSON & KLOSS **726.**

FAM. UPUPIDAE.

Types in the Tring Museum p. 113, HARTERT **349.**

FAM. IRRISORIDAE.

Scoptelus brunneiceps on its relations to other species p. 423, STRESEMANN **825.**

FAM. MEROPIDAE.

Types in the Tring Museum p. 112, HARTERT **349.**

Melittophagus pusillus note on East African races p. 112, HARTERT **349.**

Merops apiaster at Bordeaux, CHAINE **140**; in Schleswig-Holstein, HAGEN **330.**

FAM. CAPRIMULGIDAE.

Chordeiles acutipennis texensis habits, WOODS **978**.

Caprimulgus europaeus sexual behaviour, ROBOUSSIN **730**.

FAM. CYPSELIDAE.

Collocalia gigantea in Sumatra col. pl. viii p. 244, ROBINSON & KLOSS **726**. —*C. esculenta* in New Hanover critical note p. 206, HARTERT **350**.—*C. francica eichhorni* **subsp. n.** St. Matthias I., HARTERT Nov. Zool. **1924** p. 269.

Chaetura vauxi nesting in an engine house, FINLEY **242**.—*Chaetura u. ussheri* nr. Kano note on races p. 26, HARTERT **347**.

[*Cypseloides*] *Nephoecetus n. niger* is the only West Indian race, GRISCOM **307**.

[*Cypselus*] *Micropus apus* note on sleeping and other habits, NASH **622**; *Apus apus* migration dates 1923, ECKARDT and others **222**; at Lübeck in 1923, HAGEN **329**; a second brood, BÜSING **130**.

FAM. TROCHILIDAE.

A collection of Humming-birds from Ecuador, BERLIOZ **83**.

Migration and plumages of Humming-birds of N. America, OBERHOLSER & CHAPMAN **641**.

Threnetes ruckeri ventosus **subsp. n.** Costa Rica and note on type loc. of species, BANGS & PENARD Occ. Papers Boston N.H. Soc. **5** p. 77.

Chalcostigma stanleyi vesigularis **subsp. n.** Peru., ZIMMER Field Mus. Publ. **12** p. 52.

FAM. COLIIDAE.

Types in Tring Museum p. 128, HARTERT **349**.

ORDER TROGONES.

[*Trogon*] *Trogonurus aurantiiventris flavidior* **subsp. n.** Panama, GRISCOM Amer. Mus. Nov. **141** p. 1.

ORDER COCCYGES.

FAM. MUSOPHAGIDAE.

The chemistry of Turacin and allied compounds in Plantain-eaters, FISCHER & HILGER **244**.

Turacus leucolophus in Cameroon p. 215, BATES & BANNERMAN **63**.

Proturacus bannermani addt. remarks and generic characters p. 215 col. pl. and textfig., BATES & BANNERMAN **63**.

Musophaga rossae savannicola in Cameroon and taxonomic note p. 214, BATES & BANNERMAN **63**.

FAM. CUCULIDAE.

Phylogeny and oology of the Cuckoo family, v. IHERING **408**.

Nesting and other habits of Indian Cuckoos, RATTRAY **692**.

[*Coccystes*] *Clamator glandarius* in Co. Kerry first record in Ireland since 1842, RENOUF **698**; in S.W. France, CHAINE **139**; in Sardinia, SCIACCHITANO **776**.—*C. serratus* variation, mutation and nomenclature of African forms p. 79, STRESEMANN **825**.

Surniculus lugubris massorhinus **subsp. n.** E. Sumatra, OBERHOLSER J. Wash. Acad. **14** p. 300.

Cuculus canorus observations on egg-depositing, BUNYARD **123**; an eye witness of oviposition, HORNE & TUCKER **392**; HUMPHRYS **401**; mimicry in the eggs, RENSCH **699**; eggs mimicing those of *Emberiza cioides ciopsis* in Japan, STRESEMANN **835**; interest in its young SCHOLEY **769**; further remarks, CHANCE **141**; the Cuckoo problem in S.E. Europe, DOBAY **204**; ringed in Thuringia captured in Syra, Cyclades, WEIGOLD **935**.—*C. gularis* immature plumage p. 80, A. ROBERTS **720**.—*C. clamosus* variation, mutation and races p. 73, STRESEMANN **825** *Surniculoides clamosus* immature plumage p. 80, A. ROBERTS **720**.

Cacomantis infuscatus variation and mutation p. 77, STRESEMANN **825**.

Chrysococcyx auratus critical and taxonomic notes p. 81, A. ROBERTS **720**.—*C. caprius chrysochlorus* validity of race discussed p. 19, HARTERT **347**.

Coccyzus erythrophthalmus nesting in Manitoba, PITTMAN **680.**

Centropus fischeri status and taxonomy, STRESEMANN **858.**—*C. violaceus* in New Ireland, ROTHSCHILD **737.**

Saurothera longirostris petersi **subsp. n.** Gonave I., Haiti, RICHMOND & BRADSHAW Proc. Biol. Soc. **37** p. 105.

Crotophaga ani habits in Demarara with fig., CLEARE **163.**

ORDER SCANSORES.

FAM. INDICATORIDAE.

The habits of the Honey Guides, CHAPIN **143.**

FAM. CAPITONIDAE.

Lybius vieilloti buchanani **subsp. n.** Asben, HARTERT Nov. Zool. **31** p. 23.

Tricholaema hirsutum review of races, BANNERMAN **52.**—*T. chapini* **subsp. n.** N. Belgian Congo, BANNERMAN Bul. B.O.C. 44 p. 101.—*T. leucomelan namaqua* critical taxonomic note p. 82, A. ROBERTS **720.**

Microbucco **nom. n.** for *Micropogonius* Roberts preoc., A. ROBERTS Ann. Transvaal Mus. **10** p. 86.

[*Barbatula*] *Buccanodon duchaillui gabriellae* **subsp. n.** French Congo, BANNERMAN Bul. B.O.C. **44** p. 100.—*Pogoniulus leucolaima* in Semliki, other races listed p. 241, GYLDENSTOLPE **321.**

FAM. RHAMPHASTIDAE.

Aulacorhynchus caeruleogularis maxillaris **subsp. n.** Costa Rica, GRISCOM Amer. Mus. Nov. **141** p. 2.

ORDER PICIFORMES.

FAM. BUCCONIDAE.

Micromonacha lanceolata austinsmithi **subsp. n.** Costa Rica, DWIGHT & GRISCOM Amer. Mus. Nov. **142** p. 2.

FAM. PICIDAE.

Woodpeckers feeding on pine-cone seeds, SWAEN **866.**

[*Gecinus*] *Picus canus* the forms in Yunnan p. 284, LA TOUCHE **485.**—*P. c. sordidior* in Kansu p. 316, LÖNNBERG **531.**—*P. chlorolophus* revision p. 53, *P. c. simlae* N.W. Himalaya p. 54, *P. c. burmae* Burma p. 54, *P. c. wellsi* Ceylon p. 56, *P. c. annamensis* S. Annam p. 57 **subspp. n.**, R. MEINERTZHAGEN Bul. B.O.C. **44.**

Campethera tullbergi in the Banso Mts. p. 220, *C. punctuligera* taxonomic note p. 221, *C. batesi* addt. information p. 221, BATES & BANNERMAN **63.**

Chrysophlegma flavinucha col. fig., ASTLEY **29.**

Melanerpes rubrifrons a mutant of *M. cruentatus* p. 422, STRESEMANN **825.**

[*Hypopicus*] *Dryobates hyperythrus sikkimenensis* **nom. n.** Sikkim, TICEHURST & WHISTLER Ibis **1924** p. 473.

[*Dendrocopus*] *Dryobates major stresemanni* E. Tibet p. 38, *D. semicoronatus szetschuanensis* W. China p. 39, **subspp. n.**, RENSCH Abh. Ber. Mus. Dresden **16** no. 2.

Picoides funebris in Kansu characters and melanism p. 317, LÖNNBERG **531.**

Dendropicos fuscescens orangensis O. F. S. Prov., *D. f. intermedius* Natal, *D. f. transvaalensis* Transvaal bushveld p. 83, *D. f. capriviensis* Caprivi Corner, *D. hartlanbi harei* Barkly W., *D. h. noomei* Delagoa Bay, *D. h. natalensis* Natal coast p. 84 **subspp. n.**, with key of S. Afr. races, A. ROBERTS Ann. Transvaal Mus. **10.**

D. poecilolaemus ranges to Cameroon p. 223, BATES & BANNERMAN **63.**

[*Iyngipicus*] *Dryobates pygmaeus* addt. descript. of Yunnan races p. 286, LA TOUCHE **485.**—*Yungipicus pygmaeus tonkinensis* **subsp. n.** Tonkin, Kuroda Bul. B.O.C. **44** 1924 p. 47.

Meiglyptes tukki hylodromus Nias I., W. Sumatra, *M. t. percnerpes* S.W. Borneo, **subspp. n.**, OBERHOLSER J. Wash. Acad. **14** p. 301.

Micropternus brachyurus annamensis **subsp. n.**, DELACOUR & JABOUILLE Bul. B.O.C. **45** p. 31.

[*Picus*] *Dryocopus martius* status in Rhineland, GEYR **276.**—*D. m. khamensis* diagnostic characters p. 317, LÖNNBERG **531.**

Picumnus limae Ceara p. 448, *P. pallidus* Para p. 449, **spp. n.**, SNETHLAGE J. Orn **1924.**

Jynx torquilla voice, SZEMERE **874**.—*J. t. pallidior* **subsp. n.** W. China, RENSCH Abh. Ber. Mus. Dresden **16** no. 2 p. 40.—*J. pulchricollis thorbecki* taxonomic note p. 219, BATES & BANNERMAN **63**.

ORDER PASSERIFORMES.

FAM. PTEROPTOCHIDAE.

Revision of the family p. 3, HELLMAYR **367**.

Scytalopus chiriquensis **sp. n.** Panama, GRISCOM Amer. Mus. Nov. **141** p. 3.—*S. latrans* **sp. n.** Colombia, HELLMAYR Field Mus. Publ. Zool. **13** p. 11.—*S. speluncae* critical remarks p. 246, MIRANDA-RIBEIRO **596**.

[*Pteroptochus*] *Scelorchilus albicollis atracamae* **subsp. n.** N. Chile, HELLMAYR Field Mus. Publ. **12** p. 71, col. pl. p. 6, HELLMAYR **367**.

Hylactes megapodius food habits, REED **696**.

FAM. CONOPOPHAGIDAE.

Revision of the family p. 25, HELLMAYR **367**.

FAM. FORMICARIIDAE.

Revision of the family p. 37, HELLMAYR **367**.

Thamnophilus unicolor grandior **nom. n.** pro *T. u. longicaudus* Chapman preoc. p. 84; *T. punctatus leucogaster* **nom. n.** pro. *T. naevius albiventris* Tacz. preoc. p. 94; *T. p. pelzelni* **subsp. n.** Matto Grosso Brazil p. 96, HELLMAYR Field Mus. Publ. Zool. **13**.

Melanopareia torquata rufescens **subsp. n.** São Paulo Brazil, HELLMAYR Field Mus. Publ. Zool. **13** p. 167.—*M. maranonicus* **sp. n.** Peru, CHAPMAN Amer. Mus. Nov. **123** p. 3.

Xenornis **gen. n.** for type *X. setifrons* **sp. n.** Panama, CHAPMAN Amer. Mus. Nov. no. **123** p. 1 fig. 1.

Dysithamnus punctitectus **sp. n.** Ecuador, CHAPMAN Amer. Mus. Nov. no. **123** p. 2.

Sipia **gen. n.** for type *Pyriglena berlepschi* Hart., HELLMAYR Field Mus. Publ. Zool. **13** p. 224.

Sclateria naevia toddi **subsp. n.** N. Brazil, HELLMAYR Field Mus. Publ. Zool. **13** p. 253.

[*Phlogopsis*] *Phaenostictus mcleannani pacificus* **subsp. n.** Ecuador, HELLMAYR Field Mus. Publ. Zool. **13** p. 321.

Chamaeza columbiana punctigula **subsp. n.** Ecuador, CHAPMAN Amer. Mus. Nov. **123** p. 4.

Grallaria martinsi **sp. n.** Ceara, SNETHLAGE J. Orn. **1924** p. 447.

Apocryptornis **gen. n.** for type *A. lineifrons* **sp. n.** Ecuador, CHAPMAN Amer. Mus. Nov. **123** p. 5 fig. 2.

FAM. DENDROCOLAPTIDAE.

Geositta cunicularia deserticolor **subsp. n.** N. Chile, HELLMAYR Field Mus. Publ. **12** p. 72.

Synallaxis cabanisi fulviventris **subsp. n.** Bolivia, CHAPMAN Amer. Mus. Nov. **123** p. 7.

Siptornis urubambensis huallagae **subsp. n.** Peru, ZIMMER Field Mus. Publ. **12** p. 53.—*Cranioleuca curtata griseipectus* **subsp. n.** Ecuador, CHAPMAN Amer. Mus. Nov. **123** p. 8.—*C. baroni capitalis* p. 54, *C. albicapilla albigula* p. 56, **subspp. n.**, Peru, ZIMMER Field Mus. Publ. Zool. **12**.

Pseudocolaptes lawrencii panamensis **subsp. n.** Panama, GRISCOM Amer. Mus. Nov. **141** p. 4.

Xenops minutus obsoletus **subsp. n.** Peru, ZIMMER Field Mus. Publ. Zool. **12** p. 57.

Sclerurus caudacutus cearensis **subsp. n.** Ceara, Brazil, SNETHLAGE J. Orn. **1924** p. 446.

Margarornis rubiginosa boultoni **subsp. n.** Panama, GRISOM Amer. Mus. Nov. **141** p. 4.

Xiphorhynchus chunchotambo napensis **subsp. n.** Ecuador, CHAPMAN Amer. Mus. Nov. **123** p. 8.

FAM. TYRANNIDAE.

Ochthoeca piurae **sp. n.** Peru p. 3, *O. frontalis orientalis* **subsp. n.** Ecuador p. 4, CHAPMAN Amer. Mus. Nov. **118**.

Mecocerculus setophagoides brunneomarginata **subsp. n.** Peru, CHAPMAN Amer. Mus. Nov. **118** p. 1.

Muscisaxicola rufivertex sanborni **subsp. n.** N. Chile, HELLMAYR Field Mus. Publ. **12** p. 73.

[*Platyrhynchus*] *Platytriccus albogularis zamorae* **subsp. n.** Ecuador, CHAPMAN Amer. Mus. Nov. **118** p. 5.

[*Todirostrum*] *Poecilotriccus ruficeps peruvianus* **subsp. n.** Peru, CHAPMAN Amer. Mus. Nov. **118** p. 5.

Euscarthmus latirostris caniceps **subsp. n.** Colombia, CHAPMAN Amer. Mus. Nov. **118** p. 7.

[*Calopteryx*]*Atalotriccus pilaris wilcoxi* **subsp. n.** Panama, GRISCOM Amer. Mus. Nov. **141** p. 5.

[*Anaeretes*] *Spizitornis reguloides albiventris* p. 7, *S. flaviventris cuzcoensis* p. 8, *S. f. huancabambae* p. 8 **subspp. n.** all from Peru, CHAPMAN Amer. Mus. Nov. **118.**—*S. parulus curatus* **subsp. n.** Argentina, WETMORE & PETERS Auk **1924** p. 145.

Mionectes striaticollis viridiceps **subsp. n.** Ecuador, CHAPMAN Amer. Mus. Nov. **118** p. 9.

Phœomyias inflava **sp. n.** Peru, CHAPMAN Amer. Mus. Nov. **118** p. 10.

Tyranniscus chrysops albigularis **subsp. n.** W. Ecuador, CHAPMAN Amer. Mus. Nov. **138** p. 1.

[*Elainea*] *Suiriri improvisa* **sp. n.** Argentina, WETMORE Auk **1924** p. 595.

Myiozetetes similis pacificus **subsp. n,** W. Ecuador, CHAPMAN Amer. Mus. Nov. **138** p. 2.

Myiobius atricaudus portovelae **subsp. n.** W. Ecuador, CHAPMAN Amer. Mus. Nov. **138** p. 3.

[*Horizopus*] *Myiochanes fumigatus zarumae* **subsp. n.** W. Ecuador, CHAPMAN Amer. Mus. Nov. **138** p. 4.

[*Blacicus*] *Myiochanes brachytarsus rhizophora* **subsp. n.** Costa Rica, DWIGHT & GRISCOM Amer. Mus. Nov. **142** p. 3.

Myiarchus crinitus nesting habits, J. H. GILLESPIE **288.**

Tyrannus verticalis extension of range, NICE **631.**

FAM. PIPRIDAE.

Piprites chloris bolivianus Bolivia *P. c. antioquiae* Colombia, **subspp. n.,** CHAPMAN Amer. Mus. Nov. **138** p. 6.

Chloropipo holochlora viridior **subsp. n.** Peru, CHAPMAN Amer. Mus. Nov. **138** p. 5.

Machaeropterus striolatus antioquiae **subsp. n.** Colombia, CHAPMAN Amer. Mus. Nov. **138** p. 5.

Manacus manacus maximus **subsp. n.** W. Ecuador, CHAPMAN Amer. Mus. Nov. **138** p. 7.

FAM. COTINGIDAE.

Euchlornis sclateri pallidigula **subsp. n.** Peru, ZIMMER Field Mus. Publ. Zool. **12** p. 60.

Heliochera rufaxilla antioquiae **subsp. n.** Colombia, CHAPMAN Amer. Mus. Nov. **138** p. 8.

FAM. PITTIDAE.

Pitta elegans elegans new to Buru and note on nomenclature p. 110, HARTERT **348.**

Eucichla cyanura two races in Java p. 279, ROBINSON & KLOSS **727.**

FAM. HIRUNDINIDAE.

[*Chelidonaria*] *Delichon urbica dasypus* recorded in Malay Peninsula p. 70, CHASEN **151.**

[*Clivicola*] *Riparia r. riparia* nesting habits, BROWN **117.**

[*Ptyonoprogne*] *Riparia obsoleta buchanani* nomencl. correction p. 27, HARTERT **347.**

Phedina brazzae note on this rare Swallow from Belgian Congo, SCLATER **779.**

Hirundo rustica nesting habits, BROWN **117**; nest on tree branch, RITCHIE **715**; method of feeding young, HORNE **391.**—*H. griseopyga gertrudis* **subsp. n.** Adamawa, GROTE Orn. Monatsb. **1924** p. 72.—*H. daurica rufula* nesting in Macedonia p. 67, GLEGG **295.**—*H. d. vernayi* **subsp. n.** Siam, KINNEAR Bul. B.O.C. **45** p. 27.—*H. puella maxima* p. 224, *H. rufula kumboensis* p. 225 addt. information, BATES & BANNERMAN **63.**

[*Atticora*] *Neochelidon griseiventris* **sp. n.** S.W. Peru, *N. tibialis minimus* **subsp. n.** Columbia with notes on other species, CHAPMAN Amer. Mus. Nov. **138** p. 9.

Lecythoplastes preussi distr., figure of tail feathers, and status p. 226, BATES & BANNERMAN **63.**

Petrochelidon andecola oroyae Peru, *P. rufocollaris aequatorialis* W. Ecuador, **subspp. n.,** CHAPMAN Amer. Mus. Nov. **138** p. 12.

Psalidoprocne petiti races discussed p. 228, BATES & BANNERMAN **63.**

FAM. MUSCICAPIDAE.

Alseonax murinus kumboensis addt. information p. 229, BATES & BANNERMAN **63.**—*Muscicapa minima grotei* addt. information p. 513; *M.* (*Alseonax*), *m. neumanniana* **subsp. n.** Omo river, GROTE J. Orn. **1924** p. 514.—*Pedilorhynchus comitatus* review of races, *P. c. aximensis* **subsp. n.** Gold Coast, SCALATER Bul. B.O.C. **45** p. 45.

Bradornis bafirawari **sp. n.** Jubaland, BANNERMAN Bul. B.O.C. **45** p. 41.

Muscicapa striata balearica wintering in Cameroon, WITHERBY **966.**—*Alseonax infulatus ruandae* and *A. i. ngomae* addt. descript. p. 200, GYLDENSTOLPE **321.**—*Oreomyias riisi* Hartlaub from Gold Coast apparently a synomym of *Cyornis magnirostris* (Blyth) from India, SCLATER **781.**

[*Siphia*] *Erythrosterna parva* song, MURR **620.**

Cyornis pallipes bannermani **subsp. n.** Annam, DELACOUR & JABOUILLE Bull. B.O.C. **45** p. 32.—*C. banyumas karimatensis* **subsp. n.** Karimata I., S.W. Borneo OBERHOLSER P.U.S.N. Mus. **64** art. 22 p. 3.—*C. vanheysti* col. pl. ix p. 269, ROBINSON & KLOSS **726.**

Niltava vivida sumatrana col. pl. ix p. 270, ROBINSON & KLOSS **726.**

Erythromyias buruensis siebersi **subsp. n.** Kei Isles, HARTERT Treubia **6** p. 24.

[*Gerygone*] *Ethelornis mouki keri* **nom. n.** for *Gerygone pallida* North nec Finsch, MATHEWS Bul. B.O.C. **45** p. 41.

[*Pseudogerygone*] *Gerygone fusca* amended description, ASHBY **24.**—*G. albofrontata* still abundant on Chatham Is. p. 199, ARCHEY & LINDSAY **16.**

[*Xanthopygia*] *Muscicapa elisae* nr. Peking p. 452, WILDER **953.**

Pogonocichla margaritata intensa races, taxonomy and nomenclature p. 155, GYLDENSTOLPE **321.**

Diaphorophyia tonsa in Semliki p. 212 figured pl. 2 figs. 2, 3, GYLDENSTOLPE **321.**

Smithornis anatomy and systematic position, should be placed in Eurylaemidae, LOWE **539.**

Trochocercus bedfordi a black mutant of *Terpsiphone ignea* and note on the races of *T. rufiventris* p. 256, STRESEMANN **825.**

Rhipidura rufiventris albertorum **subsp. n.** New Hanover, HARTERT Nov. Zool. **1924** p. 207.—*R. rufiventris mussai* **subsp. n.** St. Matthias I. nr. New Guinea, ROTHSCHILD & HARTERT Bul. B.O.C. **44** p. 52, also *R. matthiae* addt. descript., HARTERT Nov. Zool. **1924** p. 271.

Terpsiphone review of the African species and races, STRESEMANN **826.**—*T. mutata voeltzkowiana* **subsp. n.** Moheli Comoro Is., STRESEMANN Orn. Monatsb. **32** p. 18.—*T. tricolor neumanni* **subsp. n.** Cameroon, STRESEMANN J. Orn. 1924 p. 259.—*Tchitrea viridis ferreti* in French Sudan note on names and races p. 35, HARTERT **347.**

Elminia longicauda schwebischi in Uganda figured p. 99 pl. iv, MENEGAUX **588.**

[*Myiagra*] *Masterornis ruficollis gouldi* **nom. n.** for *Myiagra laterostris* Gould nec Swains, MATHEWS Bul. B.O.C. **45** p. 41.

Cryptolopha xanthoschistos jerdoni and other species range and status in Sikkim and Assam p. 1025, STEVENS **817.**—*C. wilhelmi* addt. description p. 223 pl. i fig. 1, GYLDENSTOLPE **321.**

Abrornis superciliaris races, *A. s. salwinensis* **subsp. n.** Burma p. 62, *A. schisticeps flavimentalis* Burma p. 63, BAKER Bul. B.O.C. **44.**

Monacha cinerascens jacobii Talaut Is., Celebes p. 38, *M. c. perpallidus* New Mecklenburg p. 39, **subspp. n.,** NEUMANN Orn. Monatsb. **1924.**—*M. menckei* addt. descript. p. 269, *M. hebetior* St. Matthias I. **sp. n.** p. 270, *M. h. eichhorni* New Hanover **subsp. n.** p. 271, HARTERT Nov. Zool. **1924.**

FAM. CAMPOPHAGIDAE.

Graucalus papuensis wilkinsi **subsp. n.** Queensland, KINNEAR Bul. B.O.C. **44** p. 68.

Edolisoma morio **subsp. nov.** ined. St. Matthias, HARTERT Nov. Zool. **1924** p. 272.

Campephaga petiti juvenile plumage p. 247, BATES & BANNERMAN **63.**—*C. theliei* at Nairobi figured p. 100 pl. iii MENEGAUX **588.**

[*Volvocivora*] *Campophaga melanoschista melanoptera* nr. Peking p. 239, WILDER **953.**

Pericrocotus range and status of Sikkim species p. 55, STEVENS **817.**—*P. solaris ripponi* **subsp. n.** Shan States, BAKER Fauna Bt. Ind. Bds. **2** p. 327.

Lalage conjuncta **sp. n.** St. Matthias I. nr. New Guinea, ROTHSCHILD & HARTERT Bul. B.O.C. **44** p. 51; also p. 272, HARTERT **351.**—*L. karu albidior* **subsp. n.** New Hanover, HARTERT Nov. Zool. **1924** p. 208.—*L. leucomela insulicola* **subsp. n.** Friday I., Torres Sts., TODD Proc. Biol. Soc. **37** p. 119.—*Perissolalage chalepa* Oberholser probably=*Lalage nigra sueurii* p. 282, ROBINSON & KLOSS **727.**

FAM. PYONONOTIDAE.

A revision of the African Bulbuls, BANNERMAN **51.**

Chloropsis media, C. venusta col. pl. x p. 282, ROBINSON & KLOSS **726.**

[*Hypsipetes*] *Microscelis amaurotis machiae* **subsp. n.** Seven Is. Japan, MOMIYAMA Dobuts. Zasshi **1923** p. 401.—*M. leucocephalus* and *perniger* subspecies or dichromatic phases? LA TOUCHE **484.**

Cerasophila thompsoni discovery of nest and eggs, WICKHAM **952.**

Criniger gularis and *C. gutturalis* list of races, KLOSS **455.**—*Trichophorus chloronotus weileri, T. swainsoni bannermanni* addt. description and figs. of heads p. 173, GYLDENSTOLPE **321.**—*Criniger tephrogenys annamensis* **subsp. n.** Annam, DELACOUR & JABOUILLE Bul. B.O.C. **45** p. 32.

Tricholestes criniger sericea nomenclature p. 288, ROBINSON & KLOSS **726.**

[*Bleda*] *Phyllastrephus flavicollis* races in Cameroon p. 245, BATES & BANNERMAN **63.**—*Antimastillas flavicollis pallidigula* in Kivu, list of other races p. 174, GYLDENSTOLPE **321.**—*Xenocichla flavicollis simplicicolor* **subsp. n.** E. Cameroon, GROTE Orn. Monatsb. **1924** p. 45.—*Baeopogon indicator chlorosaturata* in the Ituri and list of other races p. 178, GYLDENSTOLPE **321.**—*Phyllastrephus clamans* is a pale phase of *P. indicator* p. 421, STRESEMANN **825.**

Andropadus ansorgei muniensis **subsp. n.** Spanish Guinea, GROTE Orn. Monatsb. **1924** p. 70.

Phyllastrephus terrestris montanus Woodbush Tr., A. ROBERTS Ann. Transvaal Mus. **10** p. 85.

Pycnonotus review of African races p. 187, GYLDENSTOLPE **321.**—*P. a. aurigaster* taken in Singapore, C. J. WILSON **958.**—*M. aurigaster thais* **subsp. n.** Siam, KLOSS J. Nat. Hist Soc. Siam **6** p. 291.

Otocompsa jocosa habits near Sydney N.S.W. where acclimatized, MACPHERSON **555.**—*Molpastes leucotis* incubation period, LAW **501.**

FAM. TIMELIIDAE.

Eupetes caerulescens occidentalis **subsp. n.** Mysol, NEUMANN Orn. Monatsb. **1924** p. 39.

Trochalopteron lineatum nomenclature of the Himalayan races p. 472, TICEHURST & WHISTLER **896.**—*Ianthocincla prjevalskii* in Kansu characters p. 314, LÖNNBERG **531.**

[*Argya*] *Turdoides fulvus fulvus* and *buchanani* ranges in the Sahara p. 32, HARTERT **347.**

Garrulax pectoralis subfusa Tenasserim, KINNEAR Bul. B.O.C. **44** p. 103 = *G. p. meridionalis* Rob. & Kloss p. 28, KINNEAR **450.**—*G. moniliger pasquieri* **subsp. n.** Annam, DELACOUR & JABOUILLE Bul. B.O.C. **45** p. 32.

Grammatoptila striata sikkimensis **subsp. n.** Sikkim, C. B. TICEHURST Bul. B.O.C. **44** p. 104.

[*Crateropus*] *Turdoides reinwardti* and *T. plebeius* races and ranges in Cameroon p. 243, BATES & BANNERMAN **63.**

Calamanthus review of the genus, ASHBY **22**.

Timalia pileata intermedia **subsp. n.** Burma, KINNEAR Bul. B.O.C. **45** p. 9.

Pellorneum ruficeps jonesi song and nesting notes, OSMASTON **651**.—*P. smithi* **sp. n.** Koh Chang I., Siam, RILEY Proc. Biol. Soc. **37** p. 129.

Macrosphenus collinsi **sp. n.** French Congo, RILEY Auk 1924 p. 326.

[*Turdinus*] *Pseudoalcippe atriceps* characters; ranging to Cameroon p. 244, BATES & BANNERMAN **63**.—*Malacocincla pyrrhoptera kivuensis* validity and taxonomy p. 171, GYLDENSTOLPE **321**.

Ptyrticus turdinus harterti characters of race p. 244, BATES & BANNERMAN **63**.

Drymocataphus tickelli olivaceus **subsp. n.** Tonkin, KINNEAR Bul. B.O.C. **45** p. 11.

[*Proparus*] *Fulvetta vinipecta kangrae* **subsp. n.** N.W. Himalaya, TICEHRUST & WHISTLER Bul. B. O. C. **44** p. 71.

Schoeniparus rufogularis stevensi **subsp. n.** Tonkin, KINNEAR Bul. B. O. C. **45** p. 10.—*Proparus brunneus weigoldi* addt. descript p. 21, STRESEMANN in JACOBI **414**.

Thringorhina guttata diluta **subsp. n.** Tonkin, KINNEAR Bul. B. O. C. **45** p. 11.

Mixornis kinneari **sp. n.** Annam, DELACOUR & JABOUILLE Bul. B. O. C. **45** p. 33.

Myiophoneus caeruleus caeruleus, M. c. eugenei races not species p. 28, STRESEMAN in JACOBI **414**.—*M. flavirostris* nesting and other habits in Java p. 14, SPENNEMANN **810**.

Ixulus flavicollis albicollis **subsp. n.** N.W. Himalaya, TICEHURST & WHISTLER Bul. B. O. C. **44** p. 71.

Psaroglossa spiloptera assamensis **subsp. n.** Assam, BAKER Bul. B. O. C. **45** p. 14.

Panurus biarmicus habits and distribution in East Prussia, CHRISTOLEIT **158**.

Suthora webbiana suffusa and *S. w. fulvicauda S. w. alphonsiana* measurements and distinctions p. 8, Stresemann in JACOBI **414**.

FAM. TROGLODYTIDAE.

Troglodytes review of the American species and races, *T. musculus oreopolus* p. 287 Nicaragua, *T. m. carabayae* p. 296 S. E. Peru, **subspp. n.**, CHAPMAN & GRISCOM Bul. Amer. Mus. H. N. **50**.—*T. m. atacamensis* **subsp. n.** N. Chile, HELLMAYR Field Mus. Publ. **12** p. 74.—*T. ochraceus remotus* **subsp. n.** Panama, GRISCOM Amer. Mus. Nov. **141** p. 5.

[*Thryothorus*] *Pheugopedius atriceps* **sp. n.** N. Peru p. 13, *P. sclateri columbianus* **subsp. n.** Columbia p. 14, CHAPMAN Amer. Mus. Nov. **138**.

[*Anorthura*] *Troglodytes troglodytes* on the race in Majorca p. 164, JORDANS **422**.—*T. t. hebridensis* **subsp. n.** Butt of Lewis, R. MEINERTZHAGEN Scot. Nat. 1924 p. 135.—*T. t. mosukei* **subsp. n.** Seven Is. Japan, MOMIYAMA Dobuts. Zasshi **1923** p. 402.

Rhinorchilus **gen. n.** for type *Leucolepis thoracicus* W. de W. MILLER Bull. Amer. Mus. **50** p. 321 (footnote).

Pnoepyga albiventer note on nomenclature and dimorphism, *P. a. pallidior* **subsp. n.** N.W. Himalaya, KINNEAR Bul. B. O. C. **45** p. 10.

FAM. CINCLIDAE.

Cinclus mexicanus unicolor economic relation to fisheries, MUNRO **614**.

FAM. MIMIDAE.

Mimus longicaudatus platensis **subsp. n.** Ecuador, CHAPMAN Amer. Mus. Nov. **143** p. 15.

FAM. TURDIDAE.

A review of the Thrushes (Turdinae) with keys and descriptions of adult and juvenile plumage, BIANCHI **86**.

The Turdidae of Egypt reviewed p. 87, KOENIG **459**.

Platycichla flavipes venezuelensis plumages, individual variation and races p. 145, HELLMAYR **365**.

[*Turdampelis*] *Cichlopsis chubbi* **sp. n.** W. Ecuador, CHAPMAN Amer. Mus. Nov. **138** p. 15.

Cochoa rothschildi **sp. n.** Sikkim, BAKER Fauna Bt. Ind. Bds. **2** p. 186.

[*Merula*] *Planesticus serranus atrosericeus* plumage changes and list of subspecies p. 135, *P. o. olivater* p. 143, HELLMAYR **365.**—*M. celaenops kurodai* **subsp. n.** Seven Is. Japan, MOMIYAMA Dobuts. Zasshi **1923** p. 404.—*Planesticus tristis panamensis* **subsp. n.** Panama, GRISCOM Amer. Mus. Nov. **141** p. 7.—*Turdus olivaceus* nesting in captivity photo, SHORE-BAILY **795.**—*T. tessmani* = *T. libonyanus saturatus* p. 503, GROTE **312.**—*T. lugubris saturatus* races and nomenclautre p. 230, BATES & BANNERMAN **63.**

Nesocichla eremita gordoni **subsp. n.** Inaccessible I. S. Atlantic, STENHOUSE Scot. Nat. **1924** p. 95.

[*Oreocichla*] *Turdus dauma eichorni* p. 52, *T. melanarius heinrothi* p. 53, **subspp. n.**, St. Matthias I. nr. New Guinea, ROTHSCHILD & HARTERT Bul. B. O. C. **214**; also p. 273, HARTERT **351.**—*T. d. choiseuli* **subsp. n.** St. Matthias I., HARTERT Nov. Zool. **1924** p. 273.—*O. mollissima simlaensis* **subsp. n.** N.W. Himalaya, BAKER Fauna Bt. Ind. Bds. **2** p. 164.

Turdus castaneus gouldi juvenile plumage, *T. kessleri* anomalous tail p. 315, LÖNNBERG **531.**—*Planesticus migratorius* extension of range in Oklahoma, NICE **631.**

Hylocichla guttata on the race breeding in Humbolt Bay district, Cal., GRINNELL **303.**—*Turdus minor* and other exotic thrushes and their occurrence in Belgium, DUPOND **217**; CONTRERAS **172.**—*T. iliacus* the night-cry and other field-notes, STUBBS **860**; a strong migration through Malta, DESPOTT **197.**—*T. philomelos* on the race found in Mull, R. MEINERTZHAGEN **577.**

[*Tharrhaleus*] *Accentor modularis* a comparison of English Scotch Irish and continental examples, MEINERTZHAGEN **585.**—*Prunella fulvescens fagani* nr. Aden p. 630, R. MEINERTZHAGEN **583.**

Hydrocichla velatus nest and eggs and other habits in Java p. 12, SPENNEMANN **810.**

[*Phoenicurus*] *Ruticilla phoenicura* breeding in Denmark, HELMS **368**; *Phoenicurus p. phoenicurus* ringed in Heligoland taken nr. Pau France, WEIGOLD **935.**—*P. ochruros ater* status in E. Prussia, TISCHLER **899.**—*P. o. gibraltariensis* nesting in south of England, COWARD **176.**—*P. erythrogaster maximus* **subsp. n.** Tibet, KLEINSCHMIDT Abh. Ber. Mus. Dresden **16** no. 2 p. 42.

[*Cyanecula*] *Luscinia svecica weigoldi* **subsp. n.** N. China, KLEINSCHMIDT Abh. Ber. Mus. Dresden **16** no. 2 p. 43.

[*Aëdon*] *Luscinia megarhynchos luscinioides* **subsp. n.** Majorca, JORDANS Journ. Orn. 1924 p. 162.—*L. brunnea dendrobiastes* **subsp. n.** Szechwan, STRESEMANN Orn. Monatsb. **1924** p. 81.

Erithacus rubecula movements and habits from marked birds, BURKITT **126.**—*E. r. melophilus* territorial and singing habits, BURKITT **125.**—*E. r. atlas* status discussed p. 81, LYNES **548.**—*E. akahige spectatoris* **subsp. n.** Seven Is. Japan, MOMIYAMA Dobuts. Zasshi **1923** p. 403.

Calliope davidi recorded from Chumbi valley S. Tibet, KINNEAR **449.**

Ianthia cyanura pallidiora **subsp. n.** N.W. Himalaya, BAKER Fauna Bt. Ind. Bds. **2** p. 101.

[*Callene*] *Vibrissosylvia batesi* generic and specific characters p. 234, BATES & BANNERMAN **63.**

Copsychus amoenus and its status in relation to *C. saularis* p. 252, STRESEMANN **825.**

Kittacincla macroura indica **nom. n.** pro. *K. macroura* auct. India, BAKER Fauna Bt. Ind. Bds. **2** p. 118.

Cossypha heuglini note on type-example and races, GROTE **317.**—*Bessonornis albicapilla genderuensis* validity of race p. 231, BATES & BANNERMAN **63.**

Erythropygia leucophrys pectoralis Smith is a valid race p. 85, A. ROBERTS **720.**

Thamnolaea generic characters, *T. c. coronata* status and characters p. 233, BATES & BANNERMAN **63**; Cameroon form discussed p. 504, GROTE **312**.

Pentholaea clericalis ranges to Cameroon p. 232, BATES & BANNERMAN **63**.

[*Pratincola*] *Saxicola s. salax* taxonomy and distribution p. 236, BATES & BANNERMAN **63**.—*S. torquata* status and range of races in Sikkim Himalaya p. 66, STEVENS **817**.—*S. caprata* a correction p. 518, C. B. TICEHURST **892**.

[*Saxicola*] *Œnanthe* the stone walls in front of the nests of desert species, HARTERT **342**.—*Œ. monticola* mutations and variations p. 545, STRESEMANN **825**.—*Œ. lugens* list of races and distribution p. 630, R. MEINERTZHAGEN **583**.—*Œ. campicolina* characters p. 236, BATES & BANNERMAN **63**.—*Phoenicurus familiaris genderuensis* generic characters and races p. 235, BATES & BANNERMAN **63**.

Catharus melpomene subspecies reviewed p. 134, HELLMAYR **365**.—*C. fuscater frater* **subsp. n.** Peru, CHAPMAN Amer. Mus. Nov. **138** p. 15.—*C. griseiceps russatus* Costa Rica p. 6, *C. gracilirostris bensoni* Panama p. 7, GRISCOM Amer. Mus. Nov. **141**.

Grandala coelicolor in Tibet habits, KLEINSCHMIDT in JACOBI **414**.

FAM. SYLVIIDAE.

The Sylviidae of Egypt monographed p. 1, KOENIG **459**.

Agrobates galactotes minor nest and eggs p. 32, HARTERT **347**.

Locustella fluviatilis in Brandenburg, SCHIERMANN **759**.—*L. luscinioides* recorded in East Prussia p. 113, TISCHLER **900**; notes near Berlin, SCHIERMANN **758**.—*L. ochotensis*, *L. pleskei* discussed in Japanese, KURODA **470**.

Acrocephalus note on Indo-Malayan races, STRESEMANN **854**.—*A. scirpaceus fuscus* (Ehr.) is the oldest name for the eastern race, STRESEMANN **845**.—*A. palustris* nestling described, BOND **96**.—*A. agricola* and *A. stentoreus* on the forms found in Assam p. 1014, STEVENS **817**.—*A. stentoreus toxopei* Buru p. 20, *A. s. lentecaptus* Lombok p. 21, *A. s. sumbae* Sumba p. 21, **subspp. n.**, and review of the other Austro-Malayan races, HARTERT Treubia **6**.—*Conopoderas kingi* **sp. n.** Nihoa I. Hawaiian Group, WETMORE Condor **26** p. 117.

[*Tribura*] *Bradypterus tacsanowskius tschiliensis* N. China, STRESEMANN Abh. Ber. Mus. Dresden **16** no. 2 p. 19.

Heliolais erythroptera characters and measurements of races p. 238, BATES & BANNERMAN **63**.

Melocichla mentalis race in Cameroon p. 239, BATES & BANNERMAN **63**.

Cisticola cisticola djadja **subsp. n.** Seven Is. Japan, MOMIYAMA Dobuts. Zasshi **1923** p. 408.—*C. juncidis intermedia* **subsp. n.** Majorca, JORDANS Jour. Orn. **1924** p. 157.—*C. nuchalis* races in Cameroon p. 238, BATES & BANNERMANN **63**.—*C. exilis* review of Oriental races, *C. e. equicaudata* **subsp. n.** Siam, BAKER Bul. B. O. C. **40** p. 39.

Threnolais **nom. n.** for *Threnetes* (type *Cisticola erythrops*) Roberts preoc., A. ROBERTS Ann. Transvaal Mus. **10** p. 85.

Franklinia gracilis examples from Assam and Bhotan Dooars described p. 1017, STEVENS **817**.—*F. rufescens austeni* **subsp. n.** Himalaya, BAKER Bul. B. O. C. **44** p. 39.

Hippolais icterina early arrival in Switzerland, KENNEDY **444**.

Sylvia atricapilla early arrival in Denmark p. 12, HELMS **368**; song, KAYSER **443**.—*S. a. koenigi* further description from Majorca p. 156, JORDANS **422**.—*S. melanocephala momus* breeding at Aleppo p. 105, G. v. H. CLARKE **161**.

Phylloscopus trochilus eversmanni questioned occurrence in Heligoland, ZEDLITZ **986**.

[*Oreopneuste*] *Phylloscopus f. fuscatus* status in Assam and Sikkim p. 1019, STEVENS **817**.—*P. fuscatus robustus* **subsp. n.**, *P. weigoldi* **sp. n.** W. China, STRESEMANN Abh. Ber. Mus. Dresden **16** no. 2. p. 16.

[*Reguloides*] *Phylloscopus inornatus* (Blyth) its identification with *P. humei*, STRESEMANN **836**; Heligoland incursion of 1923 and its cause, WEIGOLD **936**; BANZHAF **54**; status in Assam and Sikkim p. 1021, STEVENS **817**.

Acanthopneuste nitidus list of races, *A. n. saturatus* **subsp. n.** Annam, BAKER Bul. B. O. C. **44** p. 62.—*Phylloscopus lugubris* status in Assam and Sikkim p. 1023, STEVENS **817.**—*Phylloscopus trivirgatus matthiae* **subsp. n.** St. Matthias Is. Nr. New Guinea, ROTHSCHILD & HARTERT Bul. B. O. C. **44** p. 52; also p. 272, HARTERT **351.**—*P. t. avicola* Kei Isles, HARTERT Treubia **6** p. 24.—*P. trochiloides* and *P. davisoni* review of subspecies, STRESEMANN **834.**

[*Acanthiza*] *Geobasileus hedleyi* nest and eggs also note on name, CAMPBELL **134.**

Apalis pulchra should be assigned to *Prinia* p. 241, BATES & BANNERMAN **63.**—*A. bamendae* affinities p. 240, BATES & BANNERMAN **63.**

Neomixis flavoviridis **sp. n.** Madagascar, HARTERT Bul. B. O. C. **45** p. 35.

Sylvietta micrura carnapi in eastern Cameroon addt. descript. p. 501, GROTE **312**; taxonomy p. 242, BATES & BANNERMAN **63.**

Camaroptera superciliaris flavigularis taxonomy notes p. 148, GYLDENSTOLPE **321.**

Hylia prasina affinities discussed, hyoid horns figured p. 253, BATES & BANNERMAN **63.**

Horornis cantans medius **subsp. n.** Seven Is. Japan, MOMIYAMA Dobuts. Zasshi **1923** p. 408.—*Horeites brunnifrons umbraticus* **subsp. n.** Yunnan, BAKER Bul. B. O. C. **44** p. 63.—*H. pallidus dulcivox* p. 16, *H. robustipes inconspicuus* p. 18 W. China, STRESEMANN Abh. Ber. Mus. Dresden **16** no. 2.

Suya crinigera assamica **subsp. n.** Assam, BAKER Bul. B. O. C. **44** p. 80.

[*Burnesia*] *Prinia gracilis hufufae* **subsp. n.** Central Arabia, TICEHURST & CHEESMAN Bul. B. O. C. **45** p. 19.

Malurus leuconotus a quite distinct species should be restored to Australian list, KINGHORN & IREDALE **446.**—*M. gouldi* is there a second species in Tasmania? FLETCHER **248.**—*M. lamberti eyrei* Mellor = *M. pulcherrimus eyrei*, ASHBY **23.**

Stipiturus ruficeps nest and eggs, H. L. WHITE **948.**

Amytornis purnelli and *A. ruficeps* nest and eggs, H. L. WHITE **948.**

FAM. VIREONIDAE.

[*Vireo*] *Vireosylva chivi griseola* French Guiana, *V. leucophrys laetissima* Bolivia, **subspp. n.**, TODD Proc. Biol. Soc. **37** p. 124.—*V. josephae* on the races p. 159, HELLMAYR **365.**

Pachysylvia semibrunnea leucogastra **subsp. n.** E. Ecuador, CHAPMAN Amer. Mus. Nov. **143** p. 1.

Cyclarhis gujanensis races discussed p. 161, HELLMAYR **365.**—*C. nigrirostris mindoensis* **subsp. n.** W. Ecuador, CHAPMAN Amer. Mus. Nov. **143** p. 1.

FAM. AMPELIDAE.

Ampelis garrulus in winter 1918–19 in Denmark, JESPERSEN **418.**

Phainoptila melanoxantha minor **subsp. n.** Panama, GRISCOM Amer. Mus. Nov. **141** p. 8.

FAM. ARTAMIDAE.

Pseudochelidon eurystomina list of recent examples obtained, SCHOUTEDEN **771.**

FAM. VANGIDAE.

Artamella **gen. n.** replaces *Artamia* inadmissable for type *Lanius viridis* P. L. S. Müll., SCLATER Bul. B. O. C. **44** p. 91.

FAM. PRIONOPIDAE.

Tephrodornis gularis Javanese and Sumatran races identical p. 291, ROBINSON & KLOSS **727.**—*T. pelvicus verneyi* **subsp. n.** Siam, KINNEAR Bul. B. O. C. **44** p. 102; =*T. p. fretensis* Rob. & Kloss p. 28, KINNEAR **450.**

Prionops poliocephalus talacoma Smith must stand for the distinct western race p. 86, A. ROBERTS **720.**

Sigmodus rufiventris mentalis in Belgian Congo p. 21, SASSI **746.**—*S. scopifrons kirki* **subsp. n.** coast lands Kenya Colony, SCLATER Bul. B. O. C. **44** p. 92.

Phaidrometopon Roberts is antedated by *Knestrometopon*, NEUMANN, A. ROBERTS Ann. Transvaal Mus. **10** p. 86.

Hypocolius ampelinus habits and winter quarters p. 613, R. MEINERTZHAGEN **582.**

FAM. LANIIDAE.

[*Fiscus*] *Lanius mackinnoni zenkerianus* **subsp. n.** Cameroon, GROTE Orn. Monatsb. **1924** p. 69.

[*Enneoctonus*] *Lanius collurio taurica* **subsp. n.** Crimea, MOLČANOW Ann. Mus. Zool. Petrograd **21** 1916 p. 54.—*E. gubernator strümpelli* in Cameroon p. 247, BATES & BANNERMAN **63.**

Malaconotus gladiator a mutant of *M. perspicillatus* p. 85, STRESEMANN **825.**

Chlorophoneus multicolor graueri addt. description and discussion p. 23, SASSI **746.**—*C. nigrithorax* a mutation of *C. multicolor* p. 87, STRESEMANN **825.**

Laniarius barbarus bornuensis doubtfully a valid race p. 249, BATES & BANNERMAN **63.**

Dryoscopus gambensis erwini addt. descript. p. 28, SASSI **746.**—*D. thamnophilus* is an artefact, STRESEMANN **840.**

[*Pomatorhynchus*] *Harpolestes senegalus* Cameroon races discussed p. 508, GROTE **312.**

Pachycephala finschi and *P. dahli* status and mutual relationship p. 209, HARTERT **350.**—*P. rufiventris* races reviewed, STRESEMANN **831.**—*P. pectoralis sexuvaria* **subsp. n.** St. Matthias I. nr. New Guinea, ROTHSCHILD & HARTERT Bul. B. O. C. **44** p. 50.

FAM. PARIDAE.

[*Poecile*] *Parus atricapillus* the distinctness of the song of the races, BACMEISTER **32.**—*P. palustris* and *P. atricapillus* races and their distribution, GENGLER **271.**

Sittiparus varius koreensis **subsp. n.** Corea KURODA & MORI Dobuts. Zasshi **36** p. 318.

[*Lophophanes*] *Parus cristatus* building an aerial nest, REBOUSSIN **694.**

[*Periparus*] *Parus rufonuchalis beavani* in Kansu p. 313, LÖNNBERG **531.**

Melanochlora sultanea seorsa **subsp. n.** Fohkien, China, BANGS Proc. N. Engl. Zoöl. Cl. **9** p. 23.

Parus major voice, SZEMERE **874**; song near Geneva, BOUBIER **100.**—*P. m. chimae* **subsp. n.** Seven Is. Japan, MOMIYAMA Dobuts. Zasshi **1923** p. 410.

[*Pentheres*] *Parus funereus* in Belgian Congo discussed p. 31, SASSI **746.**—*Melaniparus niger camerunensis* a valid race, p. 249, *M. albiventris* in the highlands of Cameroon p. 250, BATES & BANNERMAN **63.**

Cyanistes coerulens brauneri **subsp. n.** Crimea MOLČANOW Ann. Mus. Zool. Petrograd **21** 1916 p. 53.

Ægithalos caudatus roseus nesting habits, BROWN **118.**

Remiza pendulina nesting habits, BOXBERGER **101.**

[*Anthoscopus*] *Remiz parvulus citrinus* distinctive characters p. 496, GROTE **312.**—*R. p. senegalensis* **subsp. n.** Senegal, GROTE Orn. Monatsb. **1924** p. 68.

Cephalopyrus flammiceps saturatus **subsp. n.** Sikkim, WHISTLER Bul. B. O. C. **45** p. 15.

FAM. REGULIDAE.

Regulus ignicapillus balearicus **subsp. n.** Majorca, JORDANS Journ. Orn. **1924** p. 165.

FAM. SITTIDAE.

Sitta europaea atlas = *S. e. hispaniensis* p. 72, LYNES **548.**

FAM. CERTHIIDAE.

Certhia song of the two species heard at same time, B. HOFFMANN **382.**—*C. familiaris* roosting habits, THORPE **890.**—*C. f. macrodactyla* life history and distinctive characters, JOUARD **424.**—*C. f. khamensis* in Kansu p. 312, LÖNNBERG **531.**—*C. f. ernsti* **subsp. n.** Hokkaido (Jesso), KURODA Bul. B. O. C. **45** p. 17.—*C. familiaris* × *C. brachydactyla* on a hybrid, DOBBRICK **206**; with a double-song, FENK **239.**

Salpornis spilonota races discussed p. 255, BATES & BANNERMAN **63.**

FAM. ZOSTEROPIDAE.

Zosterops s. senegalensis at Kano, with note on races p. 35, HARTERT **347.**—*Z. vaughani* **sp. n.** Pemba I. E. Africa, BANNERMAN Bul. B. O. C. **44** p. 41.

FAM. DICAEIDAE.

The Australian species reviewed with col. pls. p. 201 (continuation), MATHEWS **567.**

Piprisoma modestum remotum Rob. & Kloss = *P. m. finschii* (Bartels) p. 298, ROBINSON & KLOSS **727.**

FAM. NECTARINIIDAE.

The Australian species reviewed with col. pls. p. 229, MATHEWS **567.**

Nectarinia famosa vulcanorum addt. information p. 82, GYLDENSTOLPE **321.**

Æthopyga siparaga mangini **subsp. n.** Annam, DELACOUR & JABOUILLE Bul. B. O. C. **45** p. 34.—*Æ. s. ochropyrrha* on Karimata I., S.W. Borneo p. 4, OBERHOLSER **640.**—*Æ. mystacalis* note p. 296 ROBINSON & KLOSS **727.**—*Æ. gouldiae* and *Æ. sanguinolenta* nesting notes, S. M. ROBINSON **728.**

Cinnyris mariquensis suahelicus figured p. 119 pl. 5, MENEGAUX **588.**—*C. osea butleri* ranges to Darfur p. 716, LYNES **547.**—*C. reichenowi* list of valid races, *C. minullus* not *C. marginatus* occurs in Cameroon p. 251, BATES & BANNERMAN **63.**—*C. coccinigaster* an unnamed race p. 71, GROTE **315.**

Chalcomitra aequatorialis addt. descript. p. 36, SASSI **746.**—*Cinnyris senegalensis* this and allied groups discussed and diagnosed, GYLDENSTOLPE **321.**

Haargneria **gen. n.** for *Cinnyris olivacea* A. Smith, A. ROBERTS Ann. Transvaal Mus. **10** p. 86.

Cyanomitra oritis bansoensis distinctive characters p. 252, BATES & BANNERMAN **63.**

Anthreptes longuemarei savannarum **subsp. n.** eastern Cameroon, GROTE Orn. Monatsb. **1924** p. 13.

FAM. MELIPHAGIDAE.

The Australian species reviewed with col. pls. p. 239, MATHEWS **567.**

Myzomela obscura aruensis **subsp. n.** Aru Is., KINNEAR Bul. B.O.C. **44** p. 69.—*M. erythina* = *M. coccinea* jnr. and *M. kleinschmidti* is a synomym p. 210, HARTERT **350.**

Acathorhynchus superciliosus stirlingi **subsp. n.** Stirling Ranges W. Austr., MATHEWS Bds. Austr. **11** p. 348.

Conopophila albogularis mimikae **subsp. n.** S.W. New Guinea, MATHEWS Bds. Austr. **11** p. 390.

[*Ptilotis*] *Sacramela keartlandi whiteorum* **subsp. n.** Musgrave Ranges Central Australia, MATHEWS Bds. Austr. **11** p. 529.

Philemon eichorni **sp. n.** New Ireland ROTHSCHILD & HARTERT Bul. B.O.C. **45** p. 8.

FAM. MNIOTILTIDAE.

[*Parula*] *Compsothlypis americana usnae* nesting and other habits, MOUSLEY **611.**—*C. pitiayumi melanogenys* **subsp. n.** Bolivia, TODD Proc. Biol. Soc. **37** p. 123.—*C. p. alarum* **subsp. n.** N. Peru, CHAPMAN Amer. Mus. Nov. **143** p. 2.—*C. p. elegans* measurements etct. p. 154, HELLMAYR **365.**

Dendroica kirtlandi nesting observation in Michigan, LEOPOLD **503.**—*D. bryanti xanthotera* **subsp. n.** Costa Rica, TODD Proc. Biol. Soc. **37** p. 123.—*D. c. caerulescens*, *D. pensylvanica* nesting notes, MOUSLEY **611.**

[*Myiothlypis*] *Basileuterus nigrocristatus* remarks on this and other Venezuelan species p. 155, HELLMAYR **365.**

Basileuterus tristriatus punctipectus Bolivia p. 3, *B. t. baezae* E. Ecuador p. 3, *B. trifasciatus nitidior* W. Ecuador p. 8, *B. castaneiceps orientalis* E. Ecuador p. 8, **subspp. n.**, *B. tacarcunae* N. Columbia **sp. n.**, CHAPMAN Amer. Mus. Nov **143.**

FAM. MOTACILLIDAE.

The Motacillidae of Egypt reviewed p. 174, KOENIG **459.**

Motacilla alba yarrelli nesting in eastern Holland, OORDT **650.**—*M. citreola weigoldi* **subsp. n.** W. China, RENSCH Abh. Ber. Mus. Dresden **16** no. 2 p. 55.—*M. flava beema* recorded at Heligoland, NATORP **623.**

Anthus discussion on relationships of African and specially Darfur species p. 709, LYNES **547.**—*A. trivialis* parents moving their young ? LENGERKEN

502.—*A. richardi annae* nr. Aden p. 627, R. MEINERTZHAGEN **583.**—*A. s. spinoletta* status in England, H. G. ALEXANDER **4.**

FAM. ALAUDIDAE.

The Egyptian Larks reviewed p. 204, KOENIG **459.**

Alaemon alaudipes alaudipes breeding in winter! HACHISUKA **324.**—*A. a. omdurmanensis* **subsp. n.** Omdurman Sudan, HACHISUKA Bul. B.O.C. **24** p. 86.

[*Otocorys*] *Eremophila berlepschi* a melanistic mutant p. 260, STRESEMANN **825.**

Calandrella b. brachydactyla in Majorca p. 166, JORDANS **422.**

Mirafra fischeri furensis range and habits p. 691; *M. africana kurrae* range and status p. 695, LYNES **547.**—*M. erythropygia* at Asben sexual differentiation, *M. cheniana chadensis* at Asben, nest and eggs p. 39, HARTERT **347.**—*M. stresemanni* p. 258 pl. xii fig. 2, *M. kurrae* p. 259 pl. xii fig. 1, BATES & BANNERMAN **63.**

Croteoptera Roberts is antedated by *Megalophonus* Gray p. 86, A. ROBERTS **720.**

Heliocorys modesta nr. Port Sudan, C. B. TICEHURST **893.**—*H. modesta saturatior*, *H. m. giffardi* distinctive characters p. 257, BATES & BANNERMAN **63.**

Galerida cristata three races in Darfur discussed p. 697, LYNES **547.**—*G. c. magna* in Iraq a wide-spread race p. 607, R. MEINERTZHAGEN **582.**—*G. theklae polatzeki* in Majorca a distinct race p. 167, JORDANS **422.**—*G. theklae berengueri* Cabrera = *G. t. erlangeri* p. 69, *G. c. aguirrei* = *G. t. ruficolor* p. 70, LYNES **548.**

[*Lullula*] *Alauda arborea* in Denmark p. 14, HELMS **368.**

Callendula dunni pallidior not distinct from typical race p. 42, HARTERT **347.**—*C. magnirostris harei* **subsp. n.** W. Cape Prov. and note on specific name, A. ROBERTS Ann. Transvaal Mus. **10** p. 86.

Ammomanes deserti payni **subsp. n.** Morocco, HARTERT Bul. B.O.C. **45** p. 36.—*A. d. geyri* **subsp. n.** Damergu, French Sahara, *A. d. mya* nest and eggs, HARTERT Nov. Zool. **1924** p. 41.—*A. d. azizi* **subsp. n.** Central Arabia, TICEHURST & CHEESMAN Bul. B.O.C. **45** p. 20.

Eremopteryx f. frontalis nest and eggs p. 43, HARTERT **347.**—*Pyrrhulauda grisea* flight and other field notes, LAW **499.**

FAM. FRINGILLIDAE.

A classification based on morphology of the palate, SUSKHIN **862.**

Aviculture for Finches, BUTLER **32.**

Finches of Switzerland, BURG **124.**

A review of the Punjab Finches, WHISTLER **946.**

[*Ligurinus*] *Chloris chloris mallorcae* **subsp. n.** Majorca, JORDANS J. Orn. **72** p. 382.—*C. c. menzbieri* **subsp. n.** Crimea, MOLČANOW Ann. Mus. Zool. Petrograd **21** 1916 p. 43.—*C. sinica sitchitoensis* **subsp. n.** Seven Is., Japan, MOMIYAMA Dobuts. Zasshi **1923** p. 413.

[*Hesperiphona*] *Coccothraustes vespertinus montanus* very abundant in New Mexico winter 1922–23, JENSEN **417.**

Catamenia analoides söderstromi **subsp. n.** Ecuador, CHAPMAN Amer. Mus. Nov. **143** p. 9.

Volatinia jacarini pacifica **subsp. n.** Peru, CHAPMAN Amer. Mus. Nov. **143** p. 11.

Fringilla coelebs the races reviewed, GENGLER **270.**—*F. coelebs balearica* **subsp. n.** Majorca, JORDANS J. Orn. **1924** p. 394.

Carduelis carduelis races in Iraq p. 607, R. MEINERTZHAGEN **582**; a schizo-chroismic or partial albino individual, STRESEMANN **850.**—*C. c. propeparva* **subsp. n.** Majorca, JORDANS J. Orn. **72** p. 384.—*C. c. nikolskii* **subsp. n.** Crimea, MOLČANOW Ann. Mus. Zool. Petrograd **21** 1916 p. 44.

[*Linaria*] *Acanthis cannabina mediterranea* addt. information p. 389, JORDANS **422.**—*Carduelis l. linaria* recorded in Berkshire, JOURDAIN **426.**

Erythrospiza githaginea zedlitzi at Asben p. 45, HARTERT **347**.

Petronia petronia petronia present status in Germany, BÜSING **131**.—*P. p. balearica* **subsp. n.** Majorca, JORDANS J. Orn. **1924** p. 396.

Passer domesticus recent decrease in Massachusetts, EATON **220**.—*P. d. balearoibericus* **subsp. n.** Majorca, JORDANS J. Orn. **1924** p. 396.—*P. d. hufufae* **subsp. n.** Central Arabia, TICEHURST & CHEESMAN Bul. B.O.C. **45** p. 19. *P. hispaniolensis* food and economic status in Sardinia, SCIACCHITANO **777**.—*P. m. montanus* voice, SZEMERE **874**; in Kansu p. 311, LÖNNBERG **531**.—*P. rutilans kikuchii* **subsp. n.** Formosa, KURODA Bul. B.O.C. **45** p. 16.—*P. griseus* Semliki and Nile valley races discussed p. 68, GYLDENSTOLPE **321**.—*P. griseus kleinschmidti* not recognizable p. 261, BATES & BANNERMAN **63**.

[*Sorella*] *Passer emini* in Darfur p. 686, LYNES **547**.

Poliospiza gularis Cameron and Nigeria races p. 262, BATES & BANNERMAN **63**.

Serinus canaria the European races and their distribution, GENGLER **268**; genetics, DUNCKER **214**.—*S. c. serinus* status in E. Prussia, TISCHLER **899**.—*S. mozambicus* Ituri races discussed p. 72, GYLDENSTOLPE **321**.—*S. mozambicus punctigula*, *S. gularis uamensis* in Neukamerun addt. information p. 492, GROTE **312**.

Anomalospiza imberbis tibatiensis addt. information p. 276, BATES & BANNERMAN **63**.

Sicalis luteiventris bogotensis **subsp. n.** Colombia, CHAPMAN Amer. Mus. Nov. **143** p. 14.

Carpodacus purpureus migrations and plumage changes in Michigan, MAGEE **557**.

Loxia curvirostra poliogyna bill adapted to break up cones of *Pinus halepensis*, LAVAUDEN **496**.—*L. leucoptera* song and nesting, DALE, **184**.

Pyrrhula pyrrhula major in N. China p. 138, WILDER **953**.—*P. erythaca altera* in Kansu p. 310, LÖNBERG **531**.

Emberiza flaviventris flavigaster in N. Nigeria p. 43, *E. striolata sahari* nest and eggs p. 44, HARTERT **347**.—*E. affinis affinis* range and status p. 264, BATES & BANNERMAN **63**.—*E. melanocephala* and *E. icterica* only one annual moult, STRESEMANN **838**.—*E. icterica* taken in Belgium, HAVRE **357**.—*E. cia* breeding in Transsylvania, DOBAY **205**.—*E. c. mokrzeckyi* **subsp. n.** Crimea, MOLČANOW Ann. Mus. Zool. Petrograd **21** 1916 p. 48.—*E. cioides tametomo* **subsp. n.** Seven Is., Japan, MOMIYAMA Dobuts. Zasshi **1923** p. 412.—*E. tschusii witherbyi* **subsp. n.** Majorca, JORDANS J. Orn. **1924** p. 401.

[*Miliaria*] *Emberiza calandra algeriensis* = *E. c. calandra* p. 399, JORDANS **422**.

Fringillaria reichenowi = *F. s. goslingi* p. 682, LYNES **547**.

Passerculus sandwichensis races in N. Bt. Columbia p. 351, SWARTH **870**.

[*Ammodromus*] *Passerherbulus maritimus macgillivrayi* nesting in S. Carolina, SPRUNT **811**.

Junco hyemalis carolinensis nesting notes in N. Carolina mountains, SPRUNT **812**.

Melospiza melodia song, WHEELER & NICHOLS **944**; on the races in Santa Barbara Islands, California, VAN ROSSEM **734**.—*M. m. atlantica* **subsp. n.** coastal Virginia, TODD Auk 1924 p. 147.

Emberizoides sphenurus floresae **subsp. n.** Panama, GRISCOM Amer. Mus. Nov. **141** p. 8.

Nesospiza acunhae present status STENHOUSE **816**.

Phrygilus alaudinus bipartitus p. 61, *P. fruticeti peruvianus* p. 63, **subspp. n.**, Peru, ZIMMER Field Mus. Publ. **12**.

Atlapetes gutturalis coloratus **subsp. n.** Panama, GRISCOM Amer. Mus. Nov. **141** p. 9.

Pselliophorus luteoviridis **sp. n.** Panama, GRISCOM Amer. Mus. Nov. **141** p. 10.

FAM. COEREBIDAE.

Coereba luteola luteola measurements, races, nomenclature p. 169, HELLMAYR **365**.

Diglossa sittoides races discussed p. 165, HELLMAYR **365.**

Ateleodacnis leucogenys cyanochrous **subsp. n.** Venezuela Todd Proc. Biol. Soc. **37** p. 122.

FAM. TANAGRIDAE.

Chlorophonia frontalis races discussed p. 174, HELLMAYR **365.**

[*Calospiza*] *Tangara nigroviridis* races reviewed and other Venezuelan species discussed p. 179, HELLMAYR **365.**—*T. chrysotis cochabambae* **subsp. n.** Bolivia, TODD Proc. Biol. Soc. **37** p. 121.

[*Tanagra*] *Thraupis sayaca* review of races and allied species, *T. s. obscura* **subsp. n.** Bolivia, NAUMBURG Auk **41** p. 105.

Phœnicothraupis atrimaxillaris **sp. n.** Costa Rica, DWIGHT & GRISCOM Amer. Mus. Nov. **142** p. 4.

Phaenicophilus poliocephalus coryi **subsp. n.** Gonave I, Haiti, RICHMOND & BRADSHAW Proc. Biol. Soc. **37** p. 107.

Calyptophilus frugivorus abbotti **subsp. n.** Gonave I, Haiti, RICHMOND & BRADSHAW Proc. Biol. Soc. **37** p. 106.

Chlorospingus venezuelanus discussion of the races p. 193, HELLMAYR **365.**—*C. pileatus diversus* **subsp. n.**, *C. taracunae* **sp. n.** Panama, GRISCOM Amer. Mus. Nov. **141** p. 11.

FAM. PLOCEIDAE.

Moults and plumage development and other general notes p. 656, LYNES **547.**

Nests and eggs of Nyasaland Weavers, BELCHER **71.**

A review of the Weavers of the Punjab, WHISTLER **946.**

Coliustruthus eques plumage sequence p. 676, LYNES **547.**—*Coliuspasser concolor* tail-position in flight p. 16 fig. 2, BATES & BANNERMAN **63.**

Penthetriopsis macrura nesting in captivity photo, SHORE-BAILY **795.**

Urobrachga distinctive characters from *Coliuspasser* p. 267, BATES & BANNERMAN **63.**

Pyromelana hordacea races reviewed p. 44, *P. capensis* races reviewed p. 47, GYLDENSTOLPE **321.** — *P. hordacea sylvatica* in Neukamerun p. 487, GROTE **312.**—*P. franciscana* and *P. afra* plumage sequence, p. 675, LYNES **547.**

Plocepasser mahali melanorhynchus list of races p. 27, GYLDENSTOLPE **321.** —*P. superciliosus brunnescens* not distinguishable p. 266, BATES & BANNERMAN **63.**

Pyrenestes size variation in beak and review of species and races CHAPIN **142.**

Cryptospiza shelleyi male described and figured p. 56 pl. 1 fig. 3, GYLDENSTOLPE **321.**

Clytospiza generic characters, *C. dybowskii* in Cameroon p. 274, BATES & BANNERMAN **63.**

Estrilda & *Lagonosticta* distinctive characters p. 270, BATES & BANNERMAN **63.**

Lagonosticta sannagae new to the Bt. Museum p. 271, *L. melanogastra* races discussed p. 272, BATES & BANNERMAN **63.**

Hypochera chalybeata camerunensis addt. descript. p. 491, GROTE **312.**—*H. c. sharii* = *H. c. camerunensis* p. 268, BATES & BANNERMAN **63.**

Aidemosyne cantans plumage-development p. 667, LYNES **547.**

Poephila mirabilis and *P. gouldiae* mutations and variation p. 547, STRESEMANN **825.**

Erythrura trichroa eichhorni **subsp. n.** St. Matthias I, HARTERT Nov. Zool. **1924** p. 274.

Uraeginthus bengalus taxonomy of the races p. 270, BATES & BANNERMAN **63.**

Textor albirostris on the bills p. 679, LYNES **547.**

Malimbus malimbicus and other central African species discussed p. 55, SASSI **746.**

Rhinoploceus **subgen. n.** for *Malimbus flavipes* Chapin. with note on species and fig. of head, GYLDENSTOLPE K. Svenska Vet.-Akad. Handl. (3) **1** No. 3 p. 35.

Anaplectes rubriceps note on races NEUNZIG **630**.

Othyphantes baglafecht neumanni addt. information p. 265, BATES & BANNERMAN **63**.

[*Heterhyphantes*] *Ploceus brachypterus* is a race of *P. nigricollis* not *P. ocularius* p. 537, STRESEMANN & NEUNZIG **859**.

Melanopteryx aureonaucha p. 34 figured pl. 1 fig. 2, GYLDENSTOLPE **321**.

[*Hyphantornis*] *Ploceus collaris* a curious variation, NEUNZIG **629**.—*H. nigriceps* figured p. 135 pl. 6 fig. 1, MENEGAUX **588**.

Sitagra fischeri figured p. 136 pl. 6 fig. 2, MENEGAUX **588**.—*Ploceus nyasae* = *P. bertrandi* ♂ NEUNZIG **629**.—*Ploceus taeniopterus furensis* breeding habits and migrations p. 666, LYNES **547**.

Spermospiza poliogenys p. 54 pl. 2 fig. 1, GYLDENSTOLPE **321**.

FAM. ICTERIDAE.

Cacicus generic characters of this and allied genera W. De W. MILLER **594**.—*C. leucoramphus peruvianus* **subsp. n.** Peru, ZIMMER Field Mus. Publ. **12** p. 66.

Amblycercus generic type and review of species and races, TODD **903**.

Molothrus brevirostris and *M. badius* nidification habits, DAGUERRE **183**.

Icterus croconotus strictifrons **subsp. n.** Bolivia, TODD Proc. Biol. Soc. **37** p. 122.

FAM. STURNIDAE.

Sturnus vulgaris in winter in Denmark, JARLUND **416**; races in Iraq with key p. 604, R. MEINERTZHAGEN **582**; its present artificial range and economics WOOD **975**.—in Montreal district, TERRILL **886**; the vesiculae seminalis and other male organs, ALVERDES **11**.

Pastor roseus on Heligoland, BANZHAF **53**; nesting in Serbia, ESTANOVE **229**.

Graculipica melanoptera list of races p. 294, ROBINSON & KLOSS **727**.

Acridotheres tristis its artificial spread in the Pacific Islands, WOOD **975**.

Aethiopsar cristatellus present range in British Columbia and elsewhere p. 133 with fig., WOOD **975**.

FAM. EULABETIDAE.

Cosmopsarus regius magnificus **subsp. n.** Tsavo Kenya Colony, v. SOMEREN Bul. B. O. C. **44** p. 71.

[*Amydrus*] *Onychognathus morio* races reviewed and variation in shape of bill, SCALTER **780**.

Lamprocolius chloropterus elisabeth **subsp. n.** Tanganyika Terr., STRESEMANN Orn. Monastsb. **1924** p. 173.—*L. c. chalybaeus* not *L. c. hartlauli* occurs at Asben p. 47, HARTERT **347**.

Spreo superbus breeding habits in captivity, EZRA **232, 233**.

FAM. BUPHAGIDAE.

Buphagus langi and other species distr. in Belgian Congo, SACEGHEM **744**.

FAM. ORIOLIDAE.

Oriolus brachyrhynchus form in Semliki valley p. 21, GYLDENSTOLPE **321**.

FAM. PARADISEIDAE.

Paradisaea apoda augustae-victoriae, *P. guilielmi* distribution and status p. 426, STRESEMAN **829**.

Phonygammus yorki **sp. n.** Cape York Australia, MATHEWS Bul. B. O. C. **45** p. 17.

FAM. PTILONORHYNCHIDAE.

Parotia wahnesi distribution and field notes p. 425, STRESEMANN **829**.

FAM. CORVIDAE.

[*Trypanocorax*] *Corvus frugilegus* roosting habits in Bute, M'WILLIAM **556**; roosting habits, STEWART **818**.

Corvus albus status in Darfur p. 650, LYNES **547**.—*C. cornix* migrations in Finland, HORTLING **395**.—*C. c. cornix* and *C. c. corone* status in Canton Ticino Switzerland, MASAREY **566**.—*C. splendens* occurring at Aden p. 626, R. MEINERTZHAGEN **583**.—*C. brachyrhynchus* economics in regard to Pecan nut growing, W. E. HOFFMAN **384**.—*C. b. pascuus* cannot be upheld, H. H. BAILEY **36**.

†*Corvus* sp. tibio-tarsus from Pliocene described p. 15, WETMORE **941**.

[*Rhinocorax*] *Corvus rhipidurus* habits at Aden, R. MEINERTZHAGEN **583**.

Pica pica pica field-notes in Cumberland, BROWN **120**.

[*Cyanopolius*] *Cyanopica cyanus* race in Kansu p. 308, LÖNNBERG **531**.

Dendrocitta formosae himalayensis ranges west to Kulu and Mendi, WHISTLER **947**.

Cissa chinensis klossi subsp. n. Annam, DELACOUR & JABOUILLE Bull. B. O. C. **45** p. 34.

Garrulus glandarius a "hairy albescent" variation, HARRISON **341**; a second example of the aberratio *reiserorum*, KLEINSCHMIDT **453**.

Boanerges internigrans in Kansu affinities and characters p. 309, LÖNNBERG **531**.

Pyrrhocorax graculus voice, ERHARD **227**.

XVI. MAMMALIA

ARRANGED BY

W. L. SCLATER, M.A.

CONTENTS.

	PAGE
I. TITLES	1
II. SUBJECT INDEX	31
II. SYSTEMATIC	37

I.—TITLES.

1.—Abel, O. Weitere Entdeckungen von Resten des riesenhaften Rhinocerotiden *Baluchitherium* in Tertiar Innerasiens. Naturwiss. Berlin **12** 1924 pp. 14–17 3 figs.

2.—Abel, O. Die Rekonstruktion von *Palaeotherium magnum* Cuvier. Palaeont. Zs. Berlin **6** 1924 pp. 14–24 1 pl. 2 text-figs.

Accoyer, H. *vide* Noël.

3.—Ackermann, O. Neues über das Vorkommen des Ackerknecht'schen Organs in der Säugetierreihe. Anat. Anz. Jena **57** 1924 pp. 449–472 22 figs.

4.—Adametz, L. et **Niezabitowski,** E. de L. Über die in Zloczow in Ostgalizien gefundenen Pferde- und Ziegenknockenüberreste (*Equus* sp., *Capra prisca* n. sp.). Bul. Intern. Acad. Krakow **1914** B pp. 761–775 2 pls.

5.—Airaghi, C. Osservazioni sul genere *Dinotherium*. Bull. Soc. geol. Ital. Roma **41** 1922 pp. 132–133.

6.—Airaghi, C. Osservazioni sui molari di alcuni Proboscidati. Natura Milano **15** 1924 pp. 25–29 1 fig.

7.—Allen, G. M. Microtines collected by the Asiatic expeditions. Amer. Mus. Nov. New York no. **133** 1924 pp. 1–13.

8.—Allen, G. M. The type specimen of *Saurocetus gibbesii* Agassiz. J. Mamm. Baltimore **5** 1924 pp. 120–121 1 pl.

9.—Allen, G. M. The *Delphinus occiduus* of Leidy. J. Mamm. Baltimore **5** 1924 pp. 194–195.

10.—Allen, G. M. and **Copeland,** M. Mammals from the MacMillan expedition to Baffin Land. J. Mamm. Baltimore **5** 1924 pp. 7–12.

11.—Allen, J. A. Carnivora collected by the American Museum Congo Expedition. Bul. Amer. Mus. N.H. **47** 1924 pp. 73–281 72 pls. 67 text-figs. 1 map.

12.—Allen, W. F. Distribution of the fibers originating from the different basal cerebellar nuclei. J. Comp. Neur. Philadelphia **36** 1924 pp. 399–439 10 figs.

13.—Allen, W. F. Localization in the ganglion semilunare of the Cat. J. Comp. Neur. Philadelphia **38** 1924 pp. 1–25 11 figs.

14.—Altmann, F. Beiträge zur Anatomie des weiblichen Genetales der Dasypodiden. Zs. ges. Anat. München Abt. 1 **72** 1924 pp. 390–406 13 figs.

15.—Altobello, G. Nuove forme di mammiferi italiani del Molise e dell' Abruzzo. Rend. Union Zool. pp. 25–37 4 figs. in Mon. Zool. Ital. Firenze **35** 1924.

16.—Ameghino, F. Le *Diprothomo* d'après Schwalbe et d'après moi. An. Mus. Nac. Buenos Aires **31** 1923 pp. 1–24 15 figs.

17.—Ameghino, C. y **Kraglievich,** L. Descripción del *Megatherium gallardoi* C. Ameg. descubierto en el Pampeano inferior de la Ciudad de Buenos Aires. An. Mus. Nac. Buenos Aires **31** 1923 pp. 135–156 5 pls.

18.—Ancel, P. et **Vintemberger,** P. L'acceptation du mâle et le rut chez la Lapine. C. R. Soc. Biol. Paris **90** 1924 pp. 437–439.

19.—Anderson, R. M. Range of the Moose extending northwards. Canad. Field Nat. Ottawa **38** 1924 pp. 27–29.

20.—Anderson, R. M. The present status and future prospects of the larger Mammals of Canada. Scot. Geogr. Mag. Edinburgh **40** 1924 pp. 321–331.

21.—Andres, J. Untersuchungen über das Auftreten und die weitere Entwicklung der embryonalen Hirnschadelknochen des Schweines. Morph. Jahrb. Leipzig **53** 1924 pp. 259–303 19 figs.

22.—Andrews, C. W. On some similarities in the evolution of the dentition in the Sirenia and Proboscidea. Ann. Mag. N. H. London (9) **13** 1924 pp. 304–309.

23.—Anon. Fourteen generic names in Mammalia included in the Official List of Zoological names; in Opinions rendered by the International Commission on Zoological Nomenclature. Smithson. Misc. Coll. Washington **73** 1922 pp. 35–37. [Opinion no. 75.]

24.—Anson, B. J. Selachian "denticles" in the Cat. Science New York **60** 1924 pp. 528–529.

25.—Anthony, A. W. Notes on the present status of the Northern Elephant Seal, *Mirounga angustirostris*. J. Mamm. Baltimore **5** 1924 pp. 145–152 8 photos.

26.—Anthony, H. E. A new fossil Perissodactyle from Peru. Amer. Mus. Nov. New York no. **111** 1924 pp. 1–3 1 fig.

27.—Anthony, H. E. Preliminary report on Ecuadorean Mammals. No. 4. Amer. Mus. Nov. New York no. **114** 1924 pp. 1–6; no. 5 *ibid* no. **120** 1924 pp. 1–3; no. 6 *ibid* no. **139** 1924 pp. 1–9 1 fig.

28.—Anthony, H. E. and **Goodwin,** G. G. A new species of Shrew from the Gaspé peninsula. Amer. Mus. Nov. New York no. **109** 1924 pp. 1–2.

29.—Anthony, H. E. Mammals collected by William Beebe at the British Guiana Tropical Research Station. Zoologica New York **3** 1921 pp. 265–286 2 pls.

30.—Anthony, R. Note preliminaire sur le poids du nouveau né comparé a celui de l'adult chez quelques mammiféres. Bul. Mém. Soc. Anthropol. Paris (7) **5** 1924 pp. 52–58.

31.—Anthony, R. Recherches anatomiques sur l'appareil génito-urinaire mâle du *Mesoplodon* et des Cétacés en general. Mem. Inst. Esp. Oceanogr. Madrid **3** mem. 2 1922 pp. 35–116 5 pls. 64 text-figs.

32.—Anthony, R. and **Coupin,** F. Sur la présence de silex dans l'estomac des Mammifères à dentition régressée. Bul. Muséum Paris **1924** pp. 257–258.

33.—Anthony, R. et **Coupin,** F. Sur la signification du grand cornet nasal antérieur de l'Eléphant. Bul. Muséum Paris **1924** pp. 259–262 1 fig.

34.—Anthony, R. et **Coupin,** F. Le cerveau de l'Ours à la naissance. C.R. Acad. Sci. Paris **178** 1924 pp. 867–869 fig.

35.—Anthony, R. et **Coupin,** F. Sur une circonvolution rhinencéphalique particulière aux Carnassiers: le gyrus transversus areae piriformis. C.R. Acad. Sci. Paris **179** 1924 pp. 712–713 fig.

36.—Arione, L. Ricerche istologische sulle espansioni nervose motrici dei muscoli laringei dei Mammiferi. Arch. Ital. Anat. Embr. Firenze **21** 1924 pp. 435–449 29 figs.

Arnold, R. *vide* Clark.

37.—Asdell, S. A. Some effects of unilateral ovariotomy in Rabbits. Brit. J. Exper. Biol. Edinburgh **1** 1924 pp. 473–486.

38.—Babik, J. Defekte Zähne beim Höhlenbären (*Ursus spelaeus*) und anderen Sängetieren. Bul. Intern. Acad. Pol. Cracovie **1923** B 1924 pp. 215–216.

Babik, J. *vide* Hoyer.

39.—Backman, G. Ueber die Moglichkeit einer atavistischen Deutung der Bathro- und Clinocephalie beim Menschen. Upsala Läkaref. Förh. **29** 1924 pp. 165–214 5 figs.

Bagg, H. J. *vide* Little.

40.—Baglioni, S. Modificazione dell'utero periodica, ciclica et indipendente della gravidanze nelle cagna. Atti Acc. Lincei Roma **33** 2 sem. 1924 pp. 136–139.

41.—Bailey, V. Breeding, feeding and other life habits of Meadow Mice (*Microtus*). J. Agr. Res. Washington **27** 1924 pp. 523–536 3 pls.

42.—Bailey, V. Beaver farming. J. Heredity Washington **13** 1923 pp. 315–318 6 figs.

43.—Balbuena, F. F. Una formula para le aplicación del método de Cajal a los cortes de retina. Trab. Lab. Invest. Biol. Univ. Madrid **20** 1923 pp. 31–39.

44.—Bamber, R. C. An apparent connection between Braxy and Thyroid activity. Nature London **113** 1924 pp. 161–162.

45.—Bant, A. A propos de la question morphologique des muscles périclaviculaires surnuméraires chez l'Homme et les Mammifères. C.R. Soc. Biol. Paris **90** 1924 pp. 900–902.

46.—Bardié, A. Présentation d'ossements d'animaux provenant de la Devise et de l'ancien Port intérieur à l'epoque Gallo-romaine et au Moyen âge. Proc.-verb. soc. linn. Bordeaux **76** 1924 pp. 75–85.

47.—Barras de Aragón. F. de las. Ensayo de aplicacion a los antropoides de la hoja craniométrica aprobada por el Congreso de Antropologia de Monaco. Bol. Soc. Esp. Nat. Hist. Madrid **24** 1924 pp. 132–151.

48.—Barry, D. T. and **Donegan,** E. Malformation of the diaphragm in a Dog. J. Anat. London **58** 1924 pp. 266–267 1 fig.

49.—Bartfeld, S. Zur Entwicklungsgeschichte der Darmarterien der Wirbeltiere. Die Entwicklungsgeschichte der Darmarterien bei *Talpa europaea.* Zs. ges. Anat. München **75** 1924 pp. 226–258 20 figs.

50.—Bast, T. H. The maxillary sinus of the Dog, with special reference to certain new structures, probably sensory in nature. Amer. J. Anat. Philadelphia **33** 1924 pp. 449–483 28 figs.

51.—Bast, T. H. A note on the phagocytic activity of bone cells. Anat. Rec. Philadelphia **28** 1924 pp. 91–93 1 fig.

52.—Beaux, O. de. Collezioni zoologiche fatte nell'Uganda dal Dott. E. Bayon. xviii Mammiferi. Parte III. Rodentia. Ann. Mus. Civ. Genova **51.** 1924 pp. 202–219.

53.—Beaux, O. de. Mammiferi della Somalia Italiana raccolta del Maggiore Vittorio Tedesco Zammarano nel Museo Civico di Milano. Atti Soc. ital. sc. nat. Milano **62** 1924 pp. 247–316.

54.—Beaux, O. de. Mammiferi della Somalia Italiana. Descrizione di due nuove sottospecie di carnivori e di una nuove sottospecie di Antilope. Atti Soc. ital. sci. nat. Milano **63** 1924 pp. 1–9.

55.—Beaux, O de, Mammiferi della Somalia Italiana. Elenco delle specie e sottospecie finora riconosciute presenti, con annotazioni di Sistematica e Zoogeographa. Atti Soc. ligustica sc. nat. geogr. Pavia **3** 1924 pp. 150–168.

56.—Beaux, O. de. Il Bisonta d'Europa e la costituzione della societe internazionale per la sua conservazione. Natura Milano **14** 1923 pp. 78–84 2 photos.

57.—Beaux, O. de. Studien über neugeborene Säugetiere (äussere Form) (Carnivora fissipedia). Zool. Jahrb. Jena Abt. Syst. **47** 1924 pp. 331–378 2 pls. 22 text-figs.

58.—Beaux, O. de. Beitrag zur Kenntnis der Gattung *Potamochoerus* Gray (= *Choiropotamus* Gray 1843. Thomas, in Proc. Biol. Soc. Washington vol. 34 1921 p. 135). Zool. Jahrb. Jena Abt. Syst. **47** 1924 pp. 379–504 3 pls. 3 text-figs.

Beccari, N. *vide* Luna.

59.—Beck, W. F. van. Die Entwicklung des Eierstockes beim Rinde. Zs. ges. Anat. München Abt. i **71** 1924 pp. 458–558 46 figs.

60.—Beddard, F. E. On some points in the structure of the venous system and the blood-glands of the neck in the Cachalot (*Physeter macrocephalus*). Ann. Mag. N. H. London (9) **13** 1924 pp. 274–282.

61.—Benôit, J. Sur l'involution des voies excrétrices du sperme et sur la disparition de le vitalité des spermatozoïdes contenus dans les voies excrétrices provoquées par la castration. C.R. soc. Biol. Paris **90** 1924 pp. 806–808.

62.—Berlucchi, C. Le cellule polimorfe della fascia dentata in animali allo stato di senilita. Riv. patol. nerv. ment., Firenze **28** 1923 pp. 241–255 1 pl.

63.—Bernhard, F. Ueber den Einfluss der Muskulatur auf die Formgestaltung des Skelettes. (Untersucht an der vorderen Tibiakante.) Arch. mikrosk. Anat. Entwickl. Berlin **102** 1924 pp. 489–498 1 fig.

64.—Bertelli, R. Contributi alle morfologia dei muscoli supraioidei dei mammiferi. Monitore Zool. Ital. Firenze **35** 1924 pp. 233–239.

65.—Bertrand, G. et **Nakamura,** H. Sur un nouveau cas de mutation physiologique chez la souris. C.R. Acad. Sci. Paris **179** 1924 pp. 320–322.

66.—Bialosuknia, W. et **Kaczkowski,** B. Recherches sur les groupes sérologiques chez les Moutons. C.R. Soc. Biol. Paris **90** 1924 pp. 1196–1198.

67.—Bianchi, V. Notes préliminaires sur les chauve-souries ou Chiroptères de la Russie. Ann. Mus. Zool. Petrograd **21** 1916 pp. lxxiii–lxxxii. [In Russian].

68.—Bianchi, V. Etat actuel de nos connaissances des Chiroptères du gouvernement de Petrograd. Ann. Mus. Zool. Petrograd **21** 1916 pp. lxxxii–lxxxvi.

69.—Birula, A. Contributions à la classification et à la distribution géographique des mammifères. VI.—Sur la position de l'*Otocolobus manul* dans le système de la fam. Felidae et sur ses rasses. Ann. Mus. Zool. Petrograd **21** 1916 pp. 130–163 3 pls. 4 text-figs. [Russian with Latin diagnoses.]

70.—Birula, A. De Felibus asiaticis duabus novis. Ann. Mus. Zool. Petrograd **21** 1916 pp. i–ii. [Latin.]

71.—Birula, A. Notice sur le *Myoxus* (*Diromys*) *nitedula* (Pal.) trouvé dans le gouvernement Tver avec un aperçu de la distribution des espèces de la fam. Myoxidae dans la Russie and Europe. Ann. Mus. Zool. Petrograd **21** 1916 pp. iii–vi. [Russian.]

72.—Bissonette, T. H. The developement of the reproductive ducts and canals in the "free-martin" with comparison of the normal. Amer. J. Anat. Philadelphia **33** 1924 pp. 267–345 24 figs.

73.—Bland-Sutton, Sir J. Attic salt for gall-stones. Brit. Med. J. London **1924** vol. ii pp. 795–798 3 figs.

74.—Bodmer-Giger, H. Aeussere Unterscheidungsmerkmale, insbesondere solche des Haarkleides der schweizerischen Feld- und Alpenhasen (*Lepus europaeus* Pall. und *L. varronis* Miller). Zs. indukt. Abstamungslehre Leipzig **35** 1924 pp. 1–112 4 pls. 35 figs.

75.—Bolam, G. Bats. Trans. Nat. Hist. Soc. Newcastle **6** 1924 pp. 48–62.

76.—Bolk, L. The chin problem. Versl. Wiss. Nat. Afd. K. Akad. Wet. Amsterdam **27** 1924 pp. 329–344 12 figs.

77.—Bolkay, St. J. Catalogue of the Mammals occurring in Bosnia-Hercegovina and preserved in the Land Museum in Sarajevo. Biol. Hung. Budapest **1** fasc. 2/3 1924 pp. 1–7.

78.—Bollea, M. Sull'organo di Chevitz dell'uomo e di alcuni mammiferi. Arch. Ital. Anat. Embr. Firenze **21** 1924. pp. 464–486 7 figs.

79.—Borisïak, A. A. *Indricotherium* n. gen. Bul. Acad. Sci. Russ. Petrograd (6) **11** 1917 pp. 1–2.

80.—Borisïak, A. A. Ostéologie du genre *Indricotherium.* Bul. Acad. Sci. Russ. Petrograd (6) **11** 1917 pp. 287–299 18 figs.

81.—Borisïak, A. A. Sur les restes d'un ongulé lophiodontoide des couches à *Indricotherium* de Turgaj. Bul. Acad. Sci. Russ. Petrograd (6) **12** 1918 pp. 1319–1322 1 fig. [In Russian.]

82.—Borisïak, A. Sur les restes des Chilicotherioidea de l'oligocène de Turgaj. Bul. Acad. Sci. Petrograd (6) **13** 1919 pp. 687–710 1 pl. [In Russian.]

83.—Borisïak, A. A. Sur la mandibule inférieure d'un petit rhinocéros des couches d'*Indricotherium* de la province de Turgaj. Bul. Acad. Sci. Russ. Petrograd (6) **15** 1921 pp. 397–402 1 fig. [In Russian].

84.—Borisïak, A. Sur les restes d'Anthracotheriidae des couches à *Indricotherium.* Bul. Acad. Sci. Russ. Leningrad (6) **17** 1923 pp. 103–110 3 figs. [Russian.]

85.—Borisïak, A. La restauration de l'*Indricotherium.* Bul. Acad. Sci. Russ. Leningrad (6) **17** 1923 pp. 111–114 2 figs.

86.—Borissiak, A. Über die Unterfamilie Indricotheriinae Boriss = Baluchitheriinae Osb. Centralb. Min. Stuttgart for **1924** pp. 571–575 fig.

87.—Borissiak, A. Mammifères fossiles de Sébastopol ii. Mém. Com. Geol. Petrograd livr. **137** 1915 pp. 1–47 3 pls. [Russian and French.]

88.—Borissiak, A. Sur un nouveau représentant des Rhinocéros gigantesque de l'oligocène d'Asie, *Indracotherium asiaticum* n.g., n. sp. Mem. Soc. Geol. Paris **25** fasc. 3 1923 pp. 3–15 3 pls. 2 text-figs.

89.—Böving, A. G. Herluf Winge 1857–1923. J. Mamm. Baltimore **5** 1924 pp. 196–199.

90.—Bower, W. T. Alaska Fishery and Fur Seal Industries in 1922. Rep. U. S. Comm. Fish. Washington for **1923** 1923 Appendix IV pp. 1–118 photos and maps.

91.—Branca, A. Dégénérescence fragmentaire et segmentation parthénogénétique dans l'ovaire des Mammifères. Cellule Louvain **34** 1924 pp. 53–68 18 figs.

92.—Brauner, A. Les Chiens de l'âge de la pierre du bassin de l'Amour. Mém. Com. Geol. Petrograd Livr. **160** 1923 pp. 1–23 2 pls. [Russian and French rés.]

Braus *vide* Lanz.

93.—Breuning, S. Beiträge zur Stammesgeschichte der Rhinocerotidae. A.—Systematik der europäischen oligozänen Formen auf Grund der Spezialisationen der Prämolaren. Verh. Zool.-Bot. Ges. Wien **73** 1924 pp. 5–46 36 figs.

94.—Brinkmann, A. Nachlese zu meinen Hautdrüsenuntersuchungen. Bergens Mus. Aarb. for **1923–24** 1924 no. 3 pp. 1–36 1 pl. 2 text-figs.

95.—Broman, I. Untersuchungen über die Embryonalentwicklung der Pinnepedia. v. Ueber die Entwicklung und den Bau des Extremitätenskeletts der Robben nebst Bemerkungen über die Entstehung von Hypo- und Hyperphalangie bei den Säugethieren in Allgemeinen: in Deutsche Südpolar Exped. Zool. vol. viii 1920 pp. 299–406 31 pls. 26 text-figs.

96.—Brown, B., **Gregory,** W. K. and **Hellman,** M. On three incomplete Anthropoid Jaws from the Siwaliks, India. Amer. Mus. Nov. New York no. **130** 1924 pp. 1–9 5 figs.

97.—Brown, C. E. Rearing Hippopotamuses in captivity. J. Mamm. Baltimore **5** 1924 pp. 243–246.

98.—Brown, K. R. Hermaphroditism in a mole with male external genetals. J. Anat. London **58** 1924 pp. 355–358 4 figs.

99.—Bruni, A. C. Osservazioni e considerazioni sullo sviluppo del nodo del seno nel cruore dei ruminanti. Monitore Zool. Ital. Firenze **35** 1924 pp. 1–12 2 pls. 4 text-figs.

100.—Burlet, H. M. de. Zur Innervation der Macula Sacculi bei Säugetieren. Anat. Anz. Jena **58** 1924 pp. 26–32 5 figs.

101.—Burlet, H. M. de und **Haas,** J. H. de. Die Stellung der Maculae Acusticae in *Macacus*-Schädel. Zs. ges. Anat. München Abt. 1 **71** 1924 pp. 233–239 4 figs.

102.—Cabrera, A. Una nueva nutria de la América Central. Bol. Soc. Esp. Hist. Nat. Madrid **24** 1924 pp. 52–53.

103.—Cabrera, A. Una nueva forma de caguan [*Galeopterus*] de la isla de Borneo. Bol. Soc. Esp. Nat. Hist. Madrid **24** 1924 pp. 128–130.

104.—Cabrera, A. Sobre el cambio de coloración en un mono del género *Cebus*. Bol. Soc. Esp. Nat. Hist. Madrid **24** 1924 pp. 130–131.

105.—Cabrera, A. Mamiferos africanos nuevos [*Herpestes, Hystrix, Leggada*]. Bol. Soc. Esp. Hist. Nat. Madrid **24** 1924 pp. 216–223 3 figs.

106.—Cabrera, A. Una nueva ardilla [*Sciurus*] de Grecia. Bol. Soc. Esp. Hist. Nat. Madrid **24** 1924 pp. 419–421.

107.—Cabrera, A. On the names of two genera of Insectivora. J. Mamm. Baltimore **5** 1924 pp. 131–132.

108.—Cabrera, A. Sobre algunos Microtinae de Cataluña. Publ. Junta Cien. Nat. Barcelona **7** no. 3 1924. pp. 1–20 6 figs.

109.—Cajal, S. R. Algunas consideraciones sobre la mesoglia de Robertson y Rio-Hortega. Trab. Labor. Invest. Biol. Univ. Madrid **18** 1920 pp. 109–127 7 figs.

110.—Cajal, R. Algunas observaciones centrarias a la hipótesis syncytial de la regeneracion neviosa y neurogenesis normal. Trab. Labor. Invest. Biol. Univ. Madrid **18** 1920 pp. 275–302 11 figs.

111.—Cajal, S. R. Textura de la corteza visual del gato. Trab. Labor. Invest Biol. Univ. Madrid **19** 1922 pp. 113–114 14 figs.

112.—Cajal, S. R. Estudios sobre la fina estructura de la corteza regional de los Roedores. 1.—Corteza suboccipitel (retroesplenial de Brodmann). Trab. Labor. Invest. Biol. Univ. Madrid **20** 1923 pp. 1–30 10 pls. 1 text-fig.

113.—Campana, D. del. Nuovi resti di cani pliocenici del Valdarno Superiore. Riv. Ital. Paleont. Parma **30** 1924 pp. 47–51 1 pl.

114.—Campana, D. del. Un nuovo resto di Sirenoide del miocene superiore della Provincia di Catanzaro. Riv. Ital. Paleont. Parma **30** 1924 pp. 53–55.

115.—Campbell, M. H. Inheritance of black and red coat colors in Cattle. Genetics Menasha Wis. **9** 1924 pp. 419–441.

116.—Capobianco, F. Su la funzione digestiva del cieco negli erbivori. Rend. Acc. Sci. Napoli (3) **28** 1922 pp. 104–111.

117.—Capobianco, F. La digestione nel rumine ed il suo meccanismo regolatore. Rend. Acc. Sci. Napoli (3) **30** 1924 pp. 116–119.

118.—Carey, E. J. Studies on the dynamics of histogenesis. viii.—Adequate intermittent traction and contraction (work) of differential periodic growth as a stimulus to myogensis. ix.—Further observations on the experimentally transformed smooth bladder muscle into cross-striated muscle. x.—Further observations on the rhthymicality of the transformed bladder. Amer. J. Anat. Philadelphia. **32** 1924 pp. 475–491 11 figs.

119.—Carpenter, F. W. A note on the connections, in the Mammalian myenteric plexus, between the enteric neurones and extrinsic nerve fibers. Anat. Rec. Philadelphia **28** 1924 pp. 149–156.

120.—Carpenter, F. W. Intra muscular nerve endings of sensory type in the small intestine, with a consideration of their probable function. J. Comp. Neur. Philadelphia **37** 1924 pp. 439–453 4 figs.

Carr-Saunders, A. M. *vide* Huxley.

121.—Castaldi, L. Studî sulla struttura e sullo sviluppo del mesencefalo. Ricerche in *Cavia cobaya*. Pt. 2. Arch. Ital. Anat. Embr. Firenze **21** 1924 pp. 172–263 21 figs.

122.—Castellanos, A. Ciervos vivientes y extinguidos de la Republica Argentina (Note preliminar). Riv. Univ. Nac. Cordoba **11** 1924 nos. 4–6 pp. 1–26 3 pls.

123.—Castle, W. E. Genetics of the Japanese Rabbit. J. Genetics Cambridge **14** 1924 pp. 225–229.

124.—Castle, W. E. Some varieties of White Rabbits. J. Heredity Washington **15** 1924 pp. 211–219 9 figs.

125.—Castle, W. E. The Japanese Rabbit and gametic purity. Proc. Nat. Acad. Sci. Washington **10** 1924 pp. 222–224.

126.—Castle, W. E. and **Wachter,** W. L. Variations in linkage in Rats and Mice. Genetics Menasha Wis. **9** 1924 pp. 1–12.

127.—Castro, F. de. Estudios sobre la neuroglia de la corteza cerebral del hombre y de los animales. I. La arquitectonia neuróglica y vascular del bulbo olfativo. Trab. Labor. Invest. Biol. Univ. Madrid **18** 1920 pp. 1–35 9 figs.

128.—Castro, F. de. Algunas observaciones sobre la histogénesis de la neuroglia en el bulbo olfativo. Trab. Labor. Invest. Biol. Univ. Madrid **18** 1920 pp. 83–108 8 figs.

129.—Castro, F. de. Contribution à la connaissance de l'innervation du pancréas. Y a-t-il des conducteurs spécifiques pour les îlots de Langerhaus, pour les acini glandulaires et pour les vaisseaux ? Trav. Lab. Rech. Biol. Univ. Madrid **21** 1923 pp. 423–457 12 figs.

130.—Catania, V. Il plesso del ganglio sottomascellare ed suo ramo faringeo nell'uomo ed in alcuni mammiferi. Arch. Ital. Anat. Embr. Firenze **21** 1924 pp. 487–532 14 figs.

131.—Cernavin, V. V. Notice sur les moutons sauvages du Tjan-Shan occidental. Ann. Mus. Zool. Petrograd **21** 1916 pp. 200–213 4 text-figs. [Russian.]

132.—Chaine, J. Le Rat noir, *Mus rattus* L. à Bordeaux. Proc.-verb. Soc. Linn. Bordeaux **75** 1924 pp. 206–207.

Chardin *vide* Teilhard de Chardin.

133.—Chasen, F. N. Notes on the fauna of Pulau Bulan, Rhio Archipelago. J. Malay. Branch R. Asiat. Soc. Singapore **2** 1924 pp. 58–65.

134.—Chasen, F. N. A preliminary account of the Mammals of Singapore Island. Singapore Nat. no. **4** 1924 pp. 76–86.

135.—Chasen, F. N. and **Kloss,** C. B. Three new races of *Sciurus vittatus*. J. Malayan Br. R. Asiat. Soc. Singapore **2** 1924 pp. 57–58.

136.—Cheesman, R. E. and **Hinton,** M. A. C. On the Mammals collected in the Desert of Central Arabia by Major R. E. Cheesman. Ann. Mag. N. H. London (9) **14** 1924 pp. 548–558.

137.—Chidester, F. E. The anatomy of an otocephalic Dog. Anat. Rec. Philadelphia **28** 1924 pp. 15–30 8 figs.

138.—Clara, M. Eine Studie zur Kenntnis der Langerhausschen Inseln. Zs. mikr. anat. Forschung. Leipzig **1** 1924 pp. 513–562 6 figs.

139.—Clark, B. L. and **Arnold,** R. Fauna of the Sooke Formation, Vancouver Isld. Univ. Cal. Publ. Geol. Berkeley **14** pp. 132–234 28 pls. [Mammals pp. 177–178].

140.—Clark, W. E. Le G. Notes on the living Tarsier (*Tarsius spectrum*). Proc. Zool. Soc. London **1924** pp. 217–223 1 pl. 1 text-fig.

141.—Clark, W. E. Le G. The myology of the Tree-Shrew (*Tupaia minor*). Proc. Zool. Soc. London **1924** pp. 481–497 24 figs.

142.—Clark, W. E. Le G. On the brain of the Tree-Shrew (*Tupaia minor*). Proc. Zool. Soc. London **1924** pp. 1053–1074 3 pls. 14 text-figs.

Clemente, L. S. *vide* Detlefsen.

143.—Cole, H. I. Taxonomic value of hair in Chiroptera. Philippine J. Sci. Manila **24** 1924 pp. 117–121 2 pls.

144.—Cooper, C. F. On the skull and dentition of *Paraceratherium bugtiense* : a genus of aberrant Rhinoceroses from the Lower Miocene deposits of Dera Bugti. Phil. Trans. R. Soc. London **212 B** 1924 pp. 369–394 19 figs.

145.—Cooper, C. F. On remains of extinct Proboscidea in the Museums of Geology and Zoology in the University of Cambridge. Part I *Elephas antiquus*. Proc. Cambridge Phil. Soc. (Biol Sci.) **1** 1924 pp. 108–119 6 text-figs. pls. vi–x.

Copeland, M. *vide* Allen.

146.—Cords, E. Zur Frage des M. retractor bulbi der Säuger. Zs. ges. Anat. München 1 Abt. **71** 1924 pp. 240–260 2 figs.

147.—Cords, E. Zur vergleichenden Morphologie des M. sterno-costalis. Zs. ges. Anat. München 1 Abt. **71** 1924 pp. 261–281 10 figs.

148.—Costa, A. C. da. Os problemas morfologicos da Cabeca dos vertebrados e a formacão dos ganglios nervosos cranianos nos Mamiferos. Arquivo Anat. Anthrop. Lisboa **8** 1924 pp. 487–523 12 figs. [Portuguese with French rés.]

Coupin, F. *vide* Anthony.

149.—Courbier, R. Rut expérimental chez la femelle castrée et chez la femelle impubère. C.R. Soc. Biol. Paris **90** 1924 pp. 453–456 figs.

150.—Courrier, R. Le cycle sexuel chez la femelle des Mammiféres. Etude de la phrase folliculaire. Arch. Biol. Liege Paris **34** 1924 pp. 369–477 5 pls.

151.—Courrier, R. Le rythme vaginal du Hérisson; action de l'injection de liquid folliculaire. C.R. Soc. Biol. Paris **90** 1924 pp. 808–809.

152.—Cram, W. E. The Red Squirrel. J. Mamm. Baltimore **5** 1924 pp. 37–41.

153.—Cristiani, H. A propos des greffes testiculaires du Singe a l'Homme. Griffes testiculaires du Singe a l'Homme. C.R. Soc. Biol. Paris **91** 1924 pp. 1061–1062.

154.—Curson, H. H. and **Hugo,** J. M. Preservation of Game in South Africa. S. Afr. J. Sci. Johannesburg **21** 1924 pp. 400–424 map.

155.—Cutore, G. Ulteriori ricerche sulle "cellule interstiziali" delle ampolle deferenziali degli equidi. Arch. Ital. Anat. Embr. Firenze **21** 1924 pp. 141–171 1 pl.

156.—Cuyler, W. K. Observations on the habits of the Striped Skunk (*Mephitis mesomelas varians*). J. Mamm. Baltimore **5** 1924 pp. 180–189.

157.—Dammerman, K. W. On *Globicephala* and some other Delphinidae from the Indo-Australian Archipelago. Treubia Batavia **5** 1924 pp. 340–352 pls. 6–9.

158.—Dart, R. A. Some notes on the double innervation of mesodermal muscle. J. Comp. Neur. Philadelphia **36** 1924 pp. 441–494 14 figs.

159.—Davidson, P. *Alticamelus alexandrae*, a new Camel from the Barstow Upper Miocene of the Mohave Desert. Univ. Cal. Publ. Geol. Berkeley **14** 1923 pp. 397–408 16 figs.

160.—Degerbøl, M. Om Muldvarpens Fremtrængen i Vester-Hanherred. The advance of the mole in northern Jutland. (Danish.) Videns. Medd. nat. For. Kjøbenhavn **76** 1923 pp. 115–118 1 map.

161.—Delanoë, P. Du nombre des mamelles chez le Rat d'Alexandrie *E. rattus* var. *alexandrinus* G. Bul. soc. path. exot. Paris **17** 1924 pp. 589–590.

162.—Delattre, A. L'asymétrie des axis de Primates. Bul. Mém. Soc. Anthropol. Paris (7) **4** 1923 pp. 107–112 3 figs.

163.—Delattre, A. Le second oriface de conjugaison du canal neural des mammifères. Bul. Mém. Soc. Anthropol. Paris (7) **5** 1924 pp. 30–35 2 figs.

Deperet, C. *vide* Stefanescu.

164.—Derscheid, J. M. et **Neuville,** H. Recherches anatomiques sur l'Okapi, *Okapia johnstoni* Scl. 1. Le caecum et la glande ileocaecale. Rev. Zool. Afr. Tervurren **12** 1924 pp. 498–507 4 pls. 1 text-fig.

165.—Detleisen, J. H. and **Clemente,** L. S. Linkage of a dilute color factor and dark-eye in Mice. Genetics Manesha Wis. **9** 1924 pp. 247–260.

166.—Detwiler, S. R. Studies on the retina. Observations on the rods of nocturnal Mammals. J. Comp. Neur. Philadelphia **37** 1923 pp. 481–489.

167.—Diamare, V. Sul miosarcoplasma. Sull'anisotropismo delle fibrocellule striata miocardiche e degli elementi di Purkinje. Riv. Biol. Roma **6** 1924 pp. 297–300 3 figs.

Dice, L. R. *vide* Wood.

168.—Dixon, J. Notes on the life history of the Gray Shrew. [*Notisorex crawfordi*.] J. Mamm. Baltimore **5** 1924 pp. 1–6 3 photos.

Dixon, J. *vide* Grinnell.

Donegan. E. *vide* Barry.

169.—Donaldson, H. H. The Rat. Data and reference tables for Albino Rat (*Mus norvegicus albinus*) and Norway Rat (*Mus norvegicus*). 2nd ed. Pp. xiv + 469 Philadelphia (Mem. Wistar Inst. Anat. Biol. no. 6) 1924 8vo.

170.—Donne, T. E. The Game Animals of New Zealand: an account of their introduction, acclimatization and development. Pp. xvi + 340 map and many illustrations London (Murray) 1924 8vo.

171.—Doyon, M. Os poilus. Reproduction expérimentale et explication du phénoméne. C.R. Soc. Biol. Paris **91** 1924 pp. 1304–1308 4 figs.

172.—Drahn, F. Varietät der Arteria Broncho-oesophagea beim Pferd. Anat. Anz. Jena **58** 1924 pp. 173–174 1 fig.

173.—Drahn, F. Ueber die Reduktion der Ulna beim Pferde. Arch. Tierheilk. Berlin **48** 1922 pp. 18–27 12 figs.

174.—Drahn, F. Zur Entstehung der Hyperdaktylie beim Schwein. Arch. Tierheilk. Berlin **49** 1923 pp. 245–260. 7 figs.

175.—Dry, F. W. The genetics of the Wensleydale breed of Sheep. 1. The occurrence of black lambs—an examination of flock records. J. Genetics Cambridge **14** 1924 pp. 203–224.

Duboc, T. *vide* Mulon.

176.—Dubois, E. On the principal characters of the cranium and the brain, the mandible and the teeth of *Pithecanthropus erectus*. Versl. Wiss. Nat. Afd. K. Akad. Wet. Amsterdam **27** 1924 pp. 265–278.

177.—Dubois, E. On the brain quantity of specialized genera of Mammals. Versl. Wis. Nat. Afd. K. Akad. Wet. Amsterdam **27** 1924 pp. 430–437.

178.—Dubois, E. Figures of the calvarium and endocranial cast, a fragment of the mandible and three teeth of *Pithecanthropus erectus*. Versl. Wis. Nat. Afd. K. Akad. Wet. Amsterdam **27** 1924 pp. 459–464 11 plates.

179.—Duerden, J. E. and **Ritchie,** M. I. F. Development of the Merino wool fibre. S. Afr. J. Sci. Johannesburg **21** 1924 pp. 480–497 4 pls.

180.—Duerden, J. E. and **Ritchie,** M. Kemp fibres in the Merino Sheep. Sci. Bul. Dept. Agr. Cape Town no. **34** 1924 pp. 1–13 figs.; also S. Afr. J. Sci. Johannesburg **20** 1923 p. 366–379 4 pls.

181.—Dusser de Barenne, J. G. Experimental researches on sensory localization in the cerebral cortex of the Monkey (*Macacus*). Proc. R. Soc. London **B 96** 1924 pp. 272–291 9 figs.

182.—Ebert, H. Die Verknockerung der Rippenknorpel beim Pferd. Jenaische Zs. Natw. **60** 1924 pp. 126–127 pls. 7, 8 5 text-figs.

183.—Edgeworth, F. H. On the masticatory, intermandibular, and hyoid muscles of *Orycteropus capensis*. J. Anat. London **58** 1924 pp. 134–139 7 figs.

184.—Éhik, J. Preliminary description of a new *Microtus agrestis* from Hungary. Ann. Hist. Nat. Mus. Nat. Budapest **21** 1924 pp. 75–78.

185.—Éhik J. A new Vole from Hungary and an interesting Bat new to the Hungarian fauna. Ann. Hist. Nat. Mus. Nat. Hung. Budapest **21** 1924 pp. 159–162.

186.—Eisberg, H. B. Intestinal arteries. Anat. Rec. Philadelphia **28** 1924 pp. 227–242 56 figs.

187.—Elton, C. S. Periodic fluctuations in the numbers of animals: their causes and effects. Brit. Journ. Exper. Biol. Edinburgh **2** 1924 pp. 119–163.

188.—Emmel, V. E. Studies on the non-nucleated elements of the blood. II.—The occurrence and genesis of non-nucleated erythrocytes or erythroplastids in Vertebrates other than Mammals. Amer. J. Anat. Philadelphia **33** 1924 pp. 347–403 86 figs.

189.—Endres, G. Die physikalisch-chemische Atmungs regulation bei winterschlafenden Warmblütern. Zs. ges. exper. Medezin Berlin **43** 1924 pp. 311–331 3 figs.

190.—Estable, C. Notes sur la structure comparative de l'écorce cérébelleuse, et dérivées physiologiques possibles. Trav. Lab. Rech. Biol. Univ. Madrid **21** 1923 pp. 169–256 22 figs.

Ferrero, A. *vide* Pictet.

Fialho, B. de A. *vide* Ozorio.

191.—Finlay, G. F. The effect of different species' lens-antisera on pregnant mice and rats and their progeny. Brit. J. Exper. Biol. Edinburgh **1** 1924 pp. 201–213.

192.—Fleischmann, A. Der Rumphang (Splanchnon) der Wirbeltiere. Untersuchungen zur vergleichenden Systematik der Eingeweide. Zs. morph. Ökol. Berlin **2** 1924 pp. 505–566 47 figs.

193.—Forsslund, K. H. De högre djurlivet inom Suorvaområdet. Ett tillägg. Fauna och Flora Stockholm **1924** pp. 53–65.

194.—Forster, A. Remarques sur les possibilités d'adaptation de la musculature anale. ii. Chez le Chimpanzé. Arch. Anat. Hist. Embr. Strasbourg **3** 1924 pp. 21–35 3 figs.

195.—Forster, A. Formation de la pyramide nasale chez les Gibbons. Arch. Anat. Hist. Embr. Strasbourg **3** 1924 pp. 107–113 2 text-figs.

196.—Forster, A. Étude sur l'évolution du pied humain. La voute longitudinale. Arch. Anat. Hist. Embr. Strasbourg **3** 1924 pp. 192–246 23 figs.

197.—Forster, A. Le sac trachéal posterior chez *Ateles ater*. Bul. Mém. Soc. Anat. Paris **94** 1924 pp. 59–67 4 figs.

198.—Forster, A. Comparaison de la position de la lame criblée de l'ethmoïde chez les Catarrhiniens et chez l'Homme. Bul. Mém. Soc. Anat. Paris **94** 1924 pp. 506–513 4 figs.

199.—Fortuyn, A. B. D. Changements histologiques dans l'écorce cérébrale de quelques Rongeurs. Trav. Lab. Rech. Biol. Univ. Madrid **22** 1924 pp. 67–98 1 pl. 13 figs.

200.—Foster, B. E. Provision of Prairie Dog to escape drowning when town is submerged. J. Mamm. Baltimore **5** 1924 pp. 266–268 2 figs.

201.—Fox, H. The practice of hygienic control and its results at the Philadelphia Zoological Gardens. J. Mamm. Baltimore **5** 1924 pp. 153–164.

202.—Fuse, G. Ein neuer experimenteller Beitrag zur microskopischen Anatomie der medialen Schleife des Kaninschens. Schleifenanteil aus der oberen Olive zur medialen Schleife (Thalamusschleife der oberen Olive). Arb. Anat. Inst. Univ. Sendai Hft. **8** pp. 1–19 2 pls.

Galvao, P. *vide* Ozorio.

203.—Gardner, J. A. On the cholesterol content of the bile, blood and flesh of the Hippopotamus. Biochem. J. Cambridge **18** 1924 pp. 777–784.

204.—Gargano, C. L'origine nuleolare dei centrosomi negli oocité di cagna. Boll. Soc. Nat. Napoli **35** 1924 pp. 106–112.

205.—Garrod, J. R. Two skeletons of the Cetacean *Pseudorca crassidens* from Thorney Fen. Proc. Zool. Soc. London **1924** pp. 177–193 3 pls. 1 text-fig.

206.—Gatenby, J. B. Notes on the Human ovary, with special reference to a corpus luteum of ovulation. Proc. R. Irish Acad. Dublin **36 B** 1924 p. 65–90 pls. iii–v.

207.—Gatenby, J. B. and **Hill,** J.P. On the ovum of *Ornithorhynchus* exhibiting polar bodies and polyspermy. Q. J. Micros. Sci. London **68** 1924 pp. 229–238 1 pl. 1 text-fig.

208.—Gaver, F. van. Contribution zoologique à l'étude des huiles d'animaux marins. Ann. Mus. Col. Marseille **31** 3e. Fasc. 1923 p. 1–140 (Cetacea Pinnepedia and Sirenia pp. 105–139)

209.—Gawrilenko, A. Die Evolution des Karpus bei den Proboscidien. Nebst Bemerkungen über phylogenetisches Altern. Anat. Anz. Jena **58** 1924 pp. 218–244 5 figs.

210.—Gelderen, C. van. Die Morphologie der Sinus durae matris. 2te.T. Die vergleichende Ontogenie der neurokranieller Venen der Vögel und Säugetiere. Zs. ges. Anat. München Abt. 1 **74** 1924 pp. 432–508 36 figs.

211.—Gemmellaro, M. Il *Nesosqualodon assenzae* Forsyth Major sp. del museo geologico della Università di Palermo. Giorn. sc. nat. econ. Palermo **32** 1921 pp. 121–154 1 pl.

212.—Gerth, H. Neue Funde von *Rhinoceros antiquitatis* Blumenb. in der Maasmündung. Verh. Geol. Mijnb. Gen. (Geol. Ser.) 's Gravenhage **7** 1923 pp. 99–104 1 pl.

213.—Ghigi, A. Vertebrati di Cirenaica raccolti dal Prof. Alessandro Ghigi nella escursione organizzeta dal Touring Club Italiano—15–24 Aprile 1920. Mem. Acc. sc. Bologna (7) **7** 1920 pp. 67–82.

214.—Gil y Gil, C. El aparato reticular de Golgi en el tejido fibroso. Trab. Labor. Invest. Biol. Univ. Madrid **19** 1922 pp. 185–193 4 figs.

215.—Girard, L. Le plan des canaux semicirculaires horizonteaux considéré comme plan horizontal de la tête. Bul. Mém. Soc. Anthropol. Paris (7) **4** 1923 pp. 14–33 14 figs.

216.—Gley, E. et **Ozorio de Almeida,** A. Température et surface cutanée du Gamba (*Didelphis didelphii*). Echanges respiratoires des Gambas normaux et éthyroïdés. C.R. Soc. Biol. Paris **90** 1924 pp. 467–470.

217.—Goldman, E. A. Two new Kangaroo Rats from Arizona. J. Washington Acad. Sci. **14** 1924 pp. 372–373.

218.—Goodwin, G. G. Mammals of the Gaspé Peninsula, Quebec. J. Mamm. Baltimore **5** 1924 pp. 246–257 4 photos.

Goodwin, G. G. *vide* Anthony.

Granger, W. *vide* Matthew.

219.—Gray, P. A. The cortical lamination pattern of the Opossum, *Didelphys virginiana*. J. Comp. Neur. Philadelphia **37** 1924 pp. 221–263 31 figs.

220.—Gray, P. A. and **Turner,** E. L. The motor cortex of the Opossum. J. Comp. Neur. Philadelphia **36** 1924 pp. 375–385 3 figs.

221.—Gregory, W. K. and **Noble,** G. K. The origin of the Mammalian alisphenoid bone. J. Morph. Philadelphia **39** 1924 pp. 435–463 14 figs.

Gregory, W. K. *vide* Brown.

Gregory, W. K. *vide* Lankester.

222.—Grinnell, G. B. A letter to Audubon. J. Mamm. Baltimore **5** 1924 pp. 223–230.

223.—Grinnell, J. and **Dixon,** J. Revision of the genus *Lynx* in California. Univ. Cal. Publ. Zool. Berkeley **21** 1924 pp. 339–354 1 pl. 1 map.

224.—Grinnell, J. and **Storer,** T. I. Animal life in the Yosemite. An account of the Mammals, Birds, Reptiles and Amphibians in a cross-section of the Sierra Nevada. Pp. xviii + 752 12 col. 48 half-tone pls. 65 text-figs. 2 maps. Berkeley Cal. (Univ. Cal. Press) 1924 8vo. [Mammals pp. 43–243.]

225.—Grodzinski, Z. Zur Entwicklung des Ductus thoracicus bei Schweineembryonen. Bul. Intern. Acad. Pol. Cracovie for **1922**B 1923 pp. 183–184 1 pl.

226.—Guyer, M. F. and **Smith,** E. A. Further studies on inheritance of eye defects induced in Rabbits. J. Exp. Zool. Philadelphia **38** 1924 pp. 449–474 1 pl. 4 text-figs.

227.—Guyon, L. Constitution de la cellule adipeuse blanche adulte des Mammifères. C.R. Soc. Biol. Paris **91** 1924 pp. 466–468.

Gyldenstolpe, N. *vide* Lönnberg.

Haas, J. H. de *vide* Burlet.

228.—Hammett, F. S. Studies of the thryoid apparatus. XXII. — The growth of the reproductive systems of male and female albino rats following on thyroparathyroidectomy and parathyroidectomy at seventy-five days of age. Amer. J. Anat. Philadelphia **34** 1924 pp. 195–213.

229.—Hammett, F. S. Studies of the thyroid apparatus. XVI. The growth of the humerus and femur of male and female Rats thyroparathyroidectomized and parathyroidectomized when 100 days of age. J. Exp. Zool. Philadelphia **39** 1924 pp. 463–504.

230.—Hanna, G. D. Temperature records of Alaska Fur Seals. Amer. J. Physiol. Baltimore **68** 1924 pp. 52–53.

231.—Hanna, G. D. and **McLellan,** M. E. A new species of Whale from the type locality of the Monterey group. Proc. Cal. Acad. Sci. San Francisco **13** 1924 pp. 237–241 5 pls.

232.—Hanson, K. B. and **Van Volkenberg,** H. L. Anthelmic efficiency of carbon tetrachlorid in the treatment of Foxes. J. Agr. Res. Washington **28** 1924 pp. 331–337.

233.—Harmer, Sir S. F. The food of Dolphins. Nature London **113** 1924 p. 532; also R. **Legendre** pp. 819–820.

234.—**Harmer,** Sir S. F. On *Mesoplodon* and other Beaked Whales. Proc. Zool. Soc. London **1924** pp. 541–587 pls. i–iv 3 text-figs.

235.—**Harms,** W. Ueber ein cyclish Auftreten des Organ (renale Blutlymphdrüse) bei der Zwergfledermaus (*Pipistrellus pipistrellus* Schreb.). Sitzb. Ges. Natw. Marburg for **1920** 1921 pp. 76–83 2 figs.

236.—**Harms,** W. Morphologische und experimentelle Untersuchungen an alternden Hünden. Zs. ges. Anat. München 1 Abt. 1924 pp. 319–381 2 pls. 33 text-figs.

237.—**Hartman,** C. G. Observations on the motility of the Opossum genetal tract and the vaginal plug. Anat. Rec. Philadelphia **27** 1924 pp. 293–303 5 figs.

238.—**Hartmann,** E. Direction du canal optique chez l'homme et les singes. Bul. Mém. Soc. Anthropol. Paris (7) **4** 1923 pp. 33–53.

239.—**Hartmann-Weinberg,** A. Interpleuralöffnung und Luftsäcke bei Marsupialiern. C.R. Acad. Russ. Leningrad **1924**A pp. 26–29 [German].

240.—**Halt,** R. T. The Land Vertebrate communities of western Leelanau Country, Michigan, with an annotated list of the Mammals of the Country. Papers Michigan Acad. Sci. New York **3** 1924 pp. 369–402 6 photos.

241.—**Hausman,** L. A. Further studies of the relationships of the structural characters of Mammalian hair. Amer. Nat. New York **58** 1924 pp. 544–557 1 pl. 9 figs.

242.—**Hay,** O. P. Description of some fossil Vertebrates from the Upper Miocene of Texas. Proc. Biol. Soc. Washington **37** 1924 pp. 1–20 6 pls. 1 text-fig.

243.—**Hay,** O. P. Notes on the osteology and dentition of the genera *Desmostylus* and *Cornwallius*. Proc. U. S. Nat. Mus. Washington **65** art. 3 1924 pp. 1–8 2 pls. 2 text-figs.

244.—**Hayek,** H. Ueber den Proatlas und über die Entwicklung der Kopfgelenke beim Menschen und bei einigen Säugetieren. Sitz. Ber. Ak. Wiss. Wien Abt. iii **130–1** 1923 pp. 25–60 2 pls. 3 text-figs.

245.—**Heidsieck,** E. Ueber das elastische Band an der Sehne des tiefen Zehenbeugers bei Paarhufen und über ähnlich gelegene elastische Fasern beim Menschen. Anat. Anz. Jena **58** 1924 pp. 245–255 4 figs.

246.—**Helbing,** H. Zur Milchbezahnung von *Amphicyon lemanensis* Pomel. Eclogae Geol. Helvet. Bâle **18** 1923 pp. 295–300 2 figs.

Hellman, M. *vide* Brown.

247.—**Helms,** O. Herluf Winge. Flora og Fauna Kjobenhavn **1924** pp. 1–5 portr.

248. **Heringa,** G. C. La connection des cellules du tissue conjunctif. Application de la méthode d'inclusion a le gélatine et de l'ultra-microscope. C.R. Soc. Biol. Paris **91** 1924 pp. 948–950.

249.—**Heringa,** G. C. Untersuchungen über den Bau und die Bedeutung des Bindegewebes. Zs. mikr.-anat. Forschung Leipzig **1** 1924 pp. 607–620 2 pls. 1 text-fig.

250.—**Hermann,** R. Ein neuer Tapir aus Brasilien und Ostbolivien. Mitt. zool. Mus. Berlin **11** 1924 pp. 167–168.

251.—**Herrick,** C. J. The nucleus olfactorius anterior of the Opossum. J. Comp. Neur. Philadelphia **37** 1924 pp. 317–359 16 figs.

252.—**Hett,** J. Histologische Beobachtungen am Pankreas der Maus. Zs. mikr.-anat. Forschung Leipzig **1** 1924 pp. 310–315.

253.—**Hill,** J. P. and **Tribe,** M. The early developement of the Cat (*Felis domestica*). Q. J. Micros. Sci. London **68** 1924 pp. 514–602 6 pls. 12 text-figs.

Hill, J. P. *vide* Gatenby.

254.—**Hilzheimer,** M. Eine neue Rekonstruktion von *Rhinoceros antiquitatis* Blbch., zugleich ein Beitrag zur Morphologie and Phylogenie dieses Tieres. N. Jahrb. Min. Stuttgart Beil.-Bd. **50** 1924 pp. 490–519 1 pl.

255.—**Hinton,** M. A. C. On a new species of *Crocidura* from Scilly. Ann. Mag. N. H. London (9) **14** 1924 pp. 509–510.

Hinton, M. A. C. *vide* Cheesman.

256.—Hirt, A. Vergleichend-anatomische Untersuchungen über die Innervation der Niere. Zs. ges. Anat. München Abt. 1 **73** 1924 pp. 621–644 9 figs.

257.—Hisaw, F. L. The absorption of the pubic symphysis of the Pocket Gopher (*Geomys bursarius* (Shaw). Amer. Nat. New York **58** 1924 pp. 93–96.

258.—Holland, W. J. Account of a skeleton of a Gorilla, remarkable because showing recovery from gunshot wounds. Ann. Carnegie Mus. Pittsburgh **15** 1924 pp. 293–296 1 pl.

259.—Hollister, N. East African Mammals in the United States National Museum. Pt. III. Primates, Artiodactyla, Perissodactyla, Proboscidea and Hyracoidea. Bul. U. S. Nat. Mus. Washington no. **99** 1924 pp. viii + 151 maps and 57 pls.

260.—Hommes, J. H. On the development of the Clavicula and the Sternum in Birds and Mammals. Tijdschr. Ned. Dierk. Ver. Amsterdam (2) **19** 1924 pp. 10–51 5 pls.

261.—Howell, A. B. Individual and age variation in *Microtus montanus yosemite*. J. Agric. Res. Washington **28** 1924 pp. 977–1016 1 pl. 25 text-figs.

262.—Howell, A. B. The Mammals of Mammoth, Mono County, California. J. Mamm. Baltimore **5** 1924 pp. 25–36.

263.—Howell, A. H. Revision of the American Pikas (Genus *Ochotona*). North Amer. Fauna Washington no. **47** 1924 pp. 1–57 6 pls. 4 maps.

264.—Howell, A. B. and Little, L. Additional notes on California Bats; with observations on the young of *Eumops*. J. Mamm. Baltimore **5** 1924 pp. 261–263 1 pl.

265.—Hoyer, H. Ein hornlose und ein gehörnter Rinderschädel aus der jüngeren Steinzeit. Bul. Intern. Acad. Pol. Cracovie **1922B** 1923 pp. 191–207 1 pl.

266.—Hoyer, H. et Babik, J. Über Zähne von Säugetiere mit an der Krone offenen Pulpahöhlen. Bul. Intern. Ac. Pol. Cracovie **1924B** pp. 445–460 1 pl. 1 text-fig.

267.—Huber, E. Zur Morphologie des M. auriculomandibularis der Säugetiere. Das experiment als Unterstützung der morphologischen Muskelforschung. Anat. Anz. Jena **58** 1924 pp. 8–26 8 figs.

268.—Huber, E. Ueber die Bedeutung der experimentellen Methode in der Facialisforschung, nebst Betrachtungen über die phylogenetische Entwicklung der Facialismuskalatur in der Vertebraten-Reihe. Anat. Anz. Jena **58** 1924 pp. 177–205.

269.—Huey, L. M. Recent observations on the Northern Elephant Seal. J. Mamm. Baltimore **5** 1924 pp. 237–242 8 photos.

Hugo, J. M. *vide* Curson.

270.—Huxley, J. S. and Carr-Saunders, A. M. Absence of prenatal effects of lens-antibodies in Rabbits. Brit. J. Exper. Biol. Edinburgh **1** 1924 pp. 215–248.

271.—Ihering, H. v. Die Kreide-Eocän-Ablagerungen der Antarktis. N. Jahrb. Min. Beil.-Bd. **51** 1924 pp. 240–301.

272.—Ingebrigtsen, O. Hjortens ut bredelse i Norge. Bergens Mus. Aarbok for **1922–23** 1924 No. 6 pp. 1–58 2 maps.

273.—Inouye, T. The question of fat absorption from the Mammalian stomach. Amer. J. Physiol. Philadelphia **69** 1924 pp. 116–124 2 figs.

274.—Iri, A. Experimentelle Beiträge zur Anatomie des Trigeminus. Zs. ges. Anat. München 1 Abt. **70** 1924 pp. 336–346 3 figs.

275.—Iwanow, E. De la fecondation artificielle des Mammifères et des Oiseaux. C. R. Acad. Sci. Paris **178** 1924 pp. 1854–1857.

276.—Jasswoin, G. Ueber die Histogenese der Dentingrundsubstanz der Säugetiere. Arch. mikrosk. Anat. Entwickl. Berlin **102** 1924 pp. 291–309 13 figs.

277.—Jasswoin, G. On the structure and development of the enamel in Mammals. Q. J. Micros. Sci. London **69** 1924 pp. 97–118 6 pls. 2 text-figs.

278.—Jensen, A. S. Frøaar og Egernvandring. Relations between the seeding of Picea abies and the wandering of the squirrel. (Danish.) Videns. Medd. nat. For. Kjøbenhavn **76** 1923 pp. 123–140 3 figs.

279.—Johnsen, S. Bjørnen. Naturen Bergen **48** 1924 pp. 289–310.

280.—Joleaud, L. Études de Geographie Zoologique sur la Berbérie. Les Rongeurs. iii. Les Cténodactylinés. Bul. soc. hist. nat. Alger **15** 1924 pp. 59–67 2 maps.

281.—Joleaud, L. Un curieux exemple de survivance d'un type Mammifère à travers les temps géologiques : le petit *Ælurictis* de Madagascar. Bull. Soc. Zool. Paris **49** 1924 pp. 10–19 1 fig.

282.—Jolly, J. et **Tannenberg,** G. de. Sur l'existence de centres germinatifs dans la substance médullaire d'un thymus de Chat. C.R. Soc. Biol. Paris **90** 1924 pp. 405–407.

283.—Jones, F. W. The Mammals of South Australia. Pt. ii. The Bandicoots and Herbivorous Marsupials. Pp. 132–270 101 figs. Adelaide (Govt. Printer) 1924 8vo.

284.—Jones, F. W. On the causation of certain hair tracts. J. Anat. London **59** 1924 pp. 72–79.

285.—Jones, F. W. The status of the Kangaroo Island Kangaroo (*Macropus fuliginosus* Desm.). Proc. Zool. Soc. London **1924** pp. 451–460 4 text-figs.

Krause, W. *vide* Lipschütz.

Kaczkowski, B. *vide* Bialosuknia.

286.—Kadanoff, D. Beiträge zur Kenntnis der Nervenendigungen im Epithel der Säugetiere. Zs. ges. Anat. München Abt. 1 **73** 1924 pp. 431–452 8 figs.

287.—Kadenoff, D. Ueber die Innervation des Mesenterium. Zs. ges. Anat. München Abt. 1 **73** 1924 pp. 453–456 3 figs.

288.—Kajava, Y. Musculus palmaris brevis : ein Tratballenmuskel beim Menschen. Eine vergleichend-anatomische Studie. Anat. Anz. Jena **58** 1924 pp. 305–339 7 figs.

289.—Kalwaryjski, E. B. Sur la membrane basale et la bordure en brosse des cellules épithéliales des plexus choroïdes. C.R. Soc. Biol. Paris **90** 1924 pp. 903–904 ; also pp. 1362–1364.

290.—Katschinsky, P. Die Herzknorpel des Pferdes. Arch. Tierheilk. Berlin **50** 1923 pp. 84–90.

291.—Kawano, R. Über das Gehörorgan der Gürteltiere. Zs. ges. Anat. München **72** Abt. 1 1924 pp. 117–130 10 figs.

292.—Keeler, C. E. The inheritance of a retinal abnormality in White Mice. Proc. Nat. Acad. Sci. Washington **10** 1924 pp. 329–333 3 figs.

Keith, Sir A. *vide* Lankester.

293.—Kellogg, R. A fossil Porpoise from the Calvert formation of Maryland. Proc. U. S. Nat. Mus. Washington **63** Art. 14 1924 pp. 1–39 18 pls.

294.—Kellogg, R. Description of a new genus and species of Whalebone Whale from the Calvert Cliffs, Maryland. Proc. U. S. Nat. Mus. Washington **63** Art. 15 1924 pp. 1–14 6 pls.

295.—Kemp, S. Notes on the Mammals of the Siju Cave, Garo Hills, Assam. Rec. Ind. Mus. Calcutta **26** 1924 pp. 23–25.

296.—Kennedy, W. P. The occurrence of polyovular graafian follicles. J. Anat. London **58** 1924 pp. 328–334 8 figs.

297.—Kerkhoff, H. Beitrag zur Kenntnis des Baues und der Funktion des Jacobsonschen Organs. Zs. mikr. anat. Forschung Leipzig **1** 1924 pp. 621–638 7 figs.

298.—Kershaw, P. S. On two collections of Mammals : (1) from Mongalla and Bahr-el-Ghazal, (2) from Lake Tsana, Abyssinia. Ann. Mag. N. H. London (9) **13** 1924 pp. 19–29.

299.—Kershaw, P. S. Two new Mammals from East Africa. Ann. Mag. N. H. London (9) **13** 1924 pp. 79–81.

300.—Kershaw, P. S. Two new Mammals from Pemba Island, East Africa. Ann. Mag. N. H. London (9) **13** 1924 p. 556–557.

301.—Kestner, O. Klimatologische Studien. 1. Der wirksame Anteil des Höhenklimas. Zs. Biol. München **73** 1921 pp. 1–6.

302.—Kindle, E. M. Note on a Mammoth tusk from the Arctic Archipelago. Amer. J. Sci. New Haven (5) **8** 1924 pp. 183–185 2 figs.

303.—King, H. D. Litter production and the sex ratio in various strains of Rats. Anat. Rec. Philadelphia **27** 1924 pp. 337–366 2 charts.

304.—Kingery, H. M. The blood supply of the enamel organ in developing molar teeth of Mammals. Amer. J. Anat. Philadelphia **33** 1924 pp. 175–195 8 figs.

305.—Kingsley, D. W. Regressive structures and the Lymphocyte. The plasma cell; its origin and development. A study of the Mammalian nictitating membrane. Anat. Record Philadelphia **29** 1924 pp. 1–19 1 pl.

306.—Kitahara, Y. Ueber die Entstehung der Zwischenzellen der Keimdrüsen des Menschen und der Säugetiere und über deren physiologische Bedeutung. Arch. Entw. Mech. Berlin **52** 1923 pp. 550–615 9 text-figs.

307.—Kitto, F. H. The survival of the American Bison in Canada. Geogr. Journ. London **63** 1924 pp. 431–437 map and 2 photos.

308.—Klaar, J. Ueber die axillaren Knäueldrüsen der Affen. Zs. ges. Anat. München Abt. I **72** 1924 pp. 609–627 4 figs.

309.—Klaauw, C. J. van der. Uber das Skelettstückchen von Paauw und den Verlauf der Chorda tympani bei einigen Marsupialia. Anat. Anz. Jena **57** 1924 pp. 240–246.

Kleyn, A. de *vide* Magnus.

Kloss, C. B. *vide* Chasen.

310.—Klugh, A. B. Notes on *Eptesicus fuscus*. J. Mamm. Baltimore **5** 1924 pp. 42–43 4 photos.

311.—Koike, K. Die Herausbildung der äusseren Körperform und der Entwicklungsgrad der Organe bei einer javanischen Kleinfledermaus (*Scotophilus temmincki* Horsfield). Zs. ges. Anat. München Abt. I **72** 1924 pp. 510–541 2 pls.

312.—Kolmer, W. Über die Augen der Fledermäuse. Zs. ges. Anat. München Abt. I **73** 1924 pp. 645–658 4 figs.

313.—Kopéc, S. On the influence exerted by certain inheritance factors on the birth weight of Rabbits. Anat. Rec. Philadelphia **27** 1924 pp. 95–118.

314.—Kopéc, S. Studies of the inheritance of the weight of new-born Rabbits. J. Genetics Cambridge **14** 1924 pp. 241–263 2 text-figs.

315.—Kos, F. Zur Syntose im Tarsus und Reduktion im Metatarsus von *Alces alces* L. Zool. Jahrb. Jena Abt. Anat. **46** 1924 pp. 509–520 1 pl. 8 text-figs.

316.—Kraglievich, L. Estudios sobre los Mylodontinae. Descripción comparativa del genero *Pleurolestodon* Rov. pp. 95–134 3 pls. Descripción del cráneo y mandibula del *Pseudolestodon myloides gallenii* n. subsp. pp. 119–134 3 pls. Analisis comparato de los valores craneométricos de los Milodontinos de Norte y Sud América pp. 457–464. An. Mus. Nac. Buenos Aires **31** 1923.

317.—Kraglievich, L. *Eumylodon incertus* n. sp. An. Mus. Nac. Buenos Aires **31** 1923 pp. 451–456 3 pls.

Kraglievich, L. *vide* Ameghino.

318.—Krausse, A. Hexapodologische Notizen. Arch. Natg. Berlin **83** Abt. A Hft. 6 1919 pp. 49–55.

319.—Krausse, A. Zur Verbreitung von *Mus spicilegus germanicus* Nock und *Mus spicilegus heroldi* m. und über eine braune Hausmaus von Eberswalde. Arch. Natg. Berlin **90** Abt. A Hft. 4 1924 pp. 142–143.

320.—Kremer, J. Studien zur Oogenese der Säugetiere nach Untersuchungen bei Ratte und Maus. Arch. mikrosk. Anat. Entwickl. Berlin **102** 1924 pp. 337–358 14 figs.

321.—Kremer, J. Das Verhalten der Vorkerne im befruchteten Ei der Ratte und der Maus mit besonderer Berücksichtigung ihrer Nucleolen. Zs. mikros. anat. Forsch. Leipzig **1** 1924 pp. 353–390 23 figs.

322.—Krieg, H. Ueber das geschichtete Plattenepithel. Grundzüge für ein kausales Verstandnis seiner Organisation. Arch. mikrosk. Anat. Entwickl. Berlin **100** 1924 pp. 488–516 13 figs.

323.—Krieg, H. Beobachtungen an argentinischen Beutelratten. Zs. Morph. Ökol. Berlin **1** 1924 pp. 637–659 14 text-figs.

324.—Krieg, H. Biologische Reisestudien in Südamerika. III. Chilenische Beutelratten. Zs. Morph. Ökol. Berlin **3** 1924 pp. 169–176 3 figs.

325.—Krölling, O. Die Form- und Organenentwicklung der Hausrindes (*Bos taurus* L.) in ersten Embryonalmonat. Zs. ges. Anat. München Abt. 1 **72** 1924 pp. 1–54 1 pl. 32 text-figs.

326.—Kronacher, C. Vererbungsversuche und Beobachtungen an Schweinen. Zs. indukt. Abstammgslehre Leipzig **34** 1924 pp. 1–120 78 figs.

327.—Kröning, F. Ueber die Modifikabilität der Säugerscheckung. Zs. indukt. Abstammgsl. Leipzig **35** 1924 pp. 113–138 1 pl. 21 text-figs.

328.—Krummacher, O. Ueber Hämoglobin Kristalle von Nagetieren, insbesondere von Hamster. Zs. Biol. München **77** 1923 pp. 175–180 3 figs.

329.—Kruse, H. D. A case of bone formation in the medulla of the suprarenal gland. Anat. Rec. Philadelphia **28** 1924 pp. 289–294 2 figs.

330.—Kuhlenbeck, H. Uber den Ursprung der Basalganglion des Grosshirns. Anat. Anz. Jena **58** 1924 pp. 49–74 8 figs.

331.—Kulagin, N. M. Recherches sur l'histoire de la propagation des aurochs en Russia. Bul. Acad. Sci. Russ. Petrograd (6) **12** 1918 pp. 1648–1658. [Russian.]

332.—Kuntschik, R. und **Sabzer, G.** Pancreasläppchen in der Milz einer jungen Katze. Arch. mikr. Anat. Entwickl. Berlin **103** 1924 pp. 430–436 3 figs.

333.—Küpfer, M. und **Schinz, H. R.** Beiträge zur Kenntnis der Skelettbildung bei domestizierten Säugetieren auf Grund röntgenologischer Untersuchungen. Aulage und Entwicklung des Knochenskelettes der Vorder- und Herextremität des Hausrindes (*Bos taurus* L.). Mem. Soc. Helv. Sci. Nat. Zurich **59** 1923 pp. viii + 136 28 pls. 68 text-figs.

334.—Kuroda, N. On new Mammals from the Riu Kiu Islands and the vicinity. Pp. 1–14 Tokyo (Publ. by author) 1924 8vo.

335.—Kuroda, N. Deer from North Kiusiu. Dobuts. Zasshi Tokyo **1924** pp. 439–441 3 figs. [in Japanese].

336.—Kuroda, N. Two new Murine Rodents from Kurile Islands, Japan. J. Mamm. Baltimore **5** 1924 pp. 118–119.

337.—Lafite-Dupont et Sékoulitch. Origine ethmoïdale des cavités accessoires des fosses nasale. C. R. Soc. Biol. Paris **91** 1924 pp. 1211–1213.

338.—Lang, H. Threatened extinction of the White Rhinoceros (*Ceratotherium simum*). J. Mamm. Baltimore **5** 1924 pp. 173–180.

339.—Lange, D. de. Die Bildung der Fötalanhange und der Placenta bei den Amnioten. Anat. Anz. Jena **58** 1924 pp. 287–303 6 figs.

340.—Langworthy, O. R. A study of the innervation of the tongue musculature with particular reference to the proprioceptive mechanism. J. Comp. Neur. Philadelphia **36** 1924 pp. 273–297 10 figs.

341.—Langworthy, O. R. The Panniculus Carnosus in Cat and Dog and its genetical relation to the pectoral musculature. J. Mamm. Baltimore **5** 1924 pp. 49–63 12 figs.

342.—Lankester, Sir E. R. The Gorilla's foot. Nature London **113** 1924 pp. 10–11 6 figs.; also S. **Smith** p. 83 1 fig.; Sir A. **Keith** pp. 83–84; W. K. **Gregory** pp. 421–423 7 figs.; Sir E. R. **Lankester** pp. 457–458; R. I. **Pocock** p. 458.

343.—Lanz. Der Nebenhoden einiger Säugetiere als Samenspeicher. Verh. Anat. Ges. in Anat. Anz. Jena **58** 1924 pp. 106–113 4 figs.; also **Braus** and **Redenz** pp. 121–129.

344.—Lanz, T. von. Beobachtungen und Versuche am Nebenhoden der Hausmaus. Zs. ges. Anat. München Abt. 1 **74** 1924 pp. 761–815 31 figs.

345.—Lataste, F. Présentation d'une patte hexadactyle d'Agneau. Proc. verb. Soc. Linn. Bordeaux **76** 1924 pp. 58–63 4 figs.

346.—Latimer, H. B. The weight of the brain, of its parts, and of the spinal cord of the Frog, Turtle and Dog. J. Comp. Neur. Philadelphia **38** 1924 pp. 49–71.

347.—Laughton, N. B. Studies in the nervous regulation of progression in animals. Amer. J. Physiol. Baltimore **70** 1924 pp. 358–384 12 figs.

348.—Lavauden, L. La chasse et la faune cynégétique en Tunisie. 2nd ed. pp. 1–50 maps and illustr. Tunis (Guénard et Franchi) 8vo. pam. 1924.

349.—Lawrentjew, B. J. Zur Morphologie des Ganglion cervical super. Anat. Anz. Jena **58** 1924 pp. 529–539 5 figs.

350.—Lebedkin, S. Ueber die Lage des Canalis semicircularis lateralis bei Säugern. Anat. Anz. Jena **58** 1924 pp. 449–460 4 figs.

351.—Le Blanc, E. und **Lind van Wyngaarden** C. de. Untersuchungen über die Innervation der Lungengefässe und Bronchen. Arch. ges. Physiol. Berlin **204** 1924 pp. 601–612 5 figs.

Lebzelter, V. *vide* Schumacher.

Legendre, R. *vide* Harmer.

352.—Lehner, J. Ueber Spermiophagie; nebst Bemerkungen zur Histologie des Nebenhodens. Zs. mikr.-anat. Forschung Leipzig **1** 1924 pp. 316–351 1 pl.

353.—Leinati, L. Misura comparative sul volume degli organi pari negli animali domestici. Ie. Cane. Lo sperimentale Firenze **78** 1924 pp. 689–704.

354.—Le Souef, A. S. Notes on some Rock Wallabies, genus *Petrogale*, with descriptions of two new species. Austral. Zool. Sydney **3** 1924 pp. 272–276.

355.—Levi, M. Studi sulla curva di accrescimento delle fibre muscolari striate. Arch. Ital. Anat. Embr. Firenze **21** 1924 pp. 264–272 4 charts.

Lind van Wyngaarden, C. de *vide* Le Blanc.

356.—Lipschütz, A. Sur une malformation intersexuelle chez le Cobaye. C.R. Acad. Sci. Paris **179** 1924 pp. 1625–1628 4 figs.

357.—Lipschütz, A., **Kause,** W. and **Voss** H. E. V. Experimental hermaphoditism on quantitative lines. J. Physiol. Cambridge **58** 1924 pp. 461–465.

358.—Lipschütz A. et **Voss,** H. E. V. Déclanchement de l'action hormonale féminine par castration testiculaire dans l'hermapharodisme expérimentale glandulaire. C.R. Soc. Biol. Paris **90** 1924 pp. 1239–1340.

359.—Lipschütz, A. et **Voss,** H. E. V. Nouvelles observations sur le temps de laitence et l'action hormonale et la quantité d'ovaire implantée, dans l'hermaphrotisme expérimentale. C.R. Soc. Biol. Paris **90** 1924 pp. 1410–1412.

360.—Lipschütz, A. et **Voss,** H. E. V. Intervention operatoire testiculaire et antagonisme des glandes sexuelles pp. 865–867. Nouveaux faits concernant l'antagonisme entre les glandes sexuelles pp. 868–869. A propos du mécanisme de l'action feminisante de la greffe ovarienne. L'hétérogreffe ovarienne de la Lapine au Cobaye n'éveille pas d'effet hormonal féminin pp. 870–871. C. R. Soc. Biol. Paris **91** 1924.

361.—Liston, W. G. and **Soparkar,** M. B. Bovine tuberculosis in India. An outbreak of tuberculosis among animals in the Bombay Zoological Gardens. Ind. J. Med. Res. Calcutta **11** 1924 pp. 671–693.

362.—Little, C. C. and **Bagg,** H. J. The occurrence of four inheritable morphological variations in mice and their possible relation to treatment with X-rays. J. Exp. Zool. Philadelphia **41** 1924 pp. 45–91 12 figs.

363.—Little, C. C. and **Strong,** L. C. Genetic studies on the transplantation of two adenocarcinomata. J. Exper. Zool. Philadelphia **41** 1924 pp. 93–114 1 fig.

Little, L. *vide* Howell.

Loftfield, J. V. G. *vide* Taylor.

364.—Lombard, C. et **Tagaud,** R. Anomalie de la vésicule biliaire chez un petit Ruminant. Bul. Mém. soc. anat. Paris **94** 1924 pp. 31–32 2 figs.

365.—Longman, H. A. The zoogeography of Marsupials. With notes on the origin of the Australian fauna. Mem. Queensl. Mus. Brisbane **8** 1924 pp. 1–15.

366.—Longman, H. A. Some Queensland fossil Vertebrates. Mem. Queensl. Mus. Brisbane **8** 1924 pp. 16–28 4 pls.

367.—Lönnberg, E. Några ord om Sumpantiloperna, *Limnotragus*. Fauna och Flora Stockholm **1924** pp. 75–83 2 figs.

368.—L[önnberg], E. Ännu en negation av Visenters [*Bos bonasus*] förekomst i Persien. Fauna och Flora Stockholm **1924** pp. 86–87.

369.—Lönnberg, E. Om nögra däggdjur från Persien. Fauna och Flora Stockholm **1924** pp. 217–228.

370.—Lönnberg, E. Notes on a Paradoxure from Central Borneo. Nyt Mag. Naturv. Kristiania **62** 1924 pp. 60–62.

371.—Lönnberg, E. and **Gyldenstolpe,** N. A new Sitatunga from Central Africa. Ann. Mag. N. H. London (9) **13** 1924 pp. 196–199 pl. vii.

372.—Loomis, F. B. The Oreodonts of the Lower Oligocene. Ann. Carnegie Mus. Pittsburgh **15** 1924 pp. 369–378 3 pls.

373.—Loomis, F. B. Miocene Oreodonts in the American Museum. Bul. Amer. Mus. N. H. New York **51** art. 1 1924 pp. 1–37 26 figs.

374.—Lord, C. E. and **Scott,** H. H. A synopsis of the Vertebrate Animals of Tasmania. Pp. viii + 340 many illustr. Hobart (Oldham) 1924 8vo. [Mammals pp. 232–318.]

Lord, C. E. *vide* Scott.

375.—Lorente de Nó, R. La cortezza cerebral del Raton (Primera contribucion. La cortezza áćustica). Trab. Labor. Invest. Biol. Univ. Madrid **20** 1923 pp. 41–78 25 pls. 1 text-fig.

376.—Lorento de Nó, R. Estudios sobre el cerebro posterior (Protuberancia y bulbo raquideo). Trab. Lab. Invest. Biol. Univ. Madrid **20** 1923 pp. 101–111 3 pls.

377.—Lorente de Nó, R. Etudes sur le cerveau postérieur. III. Sur les connexions extra-cerebellenses des fascicules afférents au cerveau et sur le fonction de cet organ. Trab. Lab. Rech. Biol. Univ. Madrid **22** 1924 pp. 51–65 1 pl. 1 text-fig.

378.—Lorimer, D. L. R. The Woolly Flying Squirrel (*Eupetaurus cinereus*). J. Bombay N. H. Soc. **30** 1924 p. 219 2 photos.

379.—Lucas, N. S. A case resembling Graves' disease in a Leopardess. Veterin. J. London **1924** pp. 172–175 2 figs.

380.—Luna, —. Primo saggio di uno studio sulla grandezza dei vasi sanguiferi. Arch. Ital. Anat. Embr. Firenze **21** 1924. pp. 87–96.

381.—Luna, E. Sopra un nucleo a grosse cellule da me descritto nel Rombencefalo di *Sus scropha*, e sui gruppi cellulari del nucleo del xii. Monitore Zool. Ital. Firenze **34** 1923 pp. 233–238 3 figs.; also N. **Beccari** pp. 238–243 fig.

382.—Luthe, W. Ueber die Fusswurzelknochen der Fischottern. Arch. Natg. Berlin **90** Abt. A Hft. 4 1924 pp. 59–141 7 pls. 7 text-figs.

383.—Ma, W. C. The changes in the pancreatic cell of the Guinea-Pig during inanition and refeeding. Anat. Rec. Philadelphia **27** 1924 pp. 47–60 4 figs.

384.—McCrea, E. D. The abdominal distribution of the vagus. J. Anat. London **59** 1924 pp. 18–40 10 figs.

385.—M'Fadyean, J. The comparative anatomy of the domesticated animals. Part 1 Osteology and Anthrology. 3rd ed. Pp. vi + 210 many illustr. London (Lewis) 1924.

McLellan, M. E. *vide* Hanna.

386.—McNutt, G. W. The corpus luteum of the Ox ovary in relation to the estrous cycle. J. Amer. Veter. Med. Ass. Detroit **65** 1924 pp. 556–597 30 figs.; also H. S. **Murphey** pp. 598–621 many figs.

387.—Magnus, R. and **Kleyn,** A. de. A contribution concerning the function of the vestibular apparatus. Versl. Wis. Nat. Afd. K. Akad. Wet. Amsterdam **27** 1924 pp. 201–216.

388.—Mailliard, J. A new Mouse (*Peromyscus slevini*) from the Gulf of California. Proc. Cal. Acad. Sci. S. Francisco (4) **12** 1924 pp. 953–956 3 figs.

389.—Mair, R. Ueber die Bregmagegend und die Lage des Bregma mit besonderer Berücksichtigung des *Pithecanthropus*. Zs. Morph. Stuttgart **22** 1922 pp. 435–480 1 pl. 20 text-figs.

390.—Mann, M. C. Cytological changes in unfertilized tubal eggs of the Rat. Biol. Bul. Wood's Hole Mass. **46** 1924 pp. 316–327.

391.—Marchand, F. Ueber die Lymphgefässe und die perivasculären Blutbildungszellen des fetalen Netzes. Arch. mikrosk. Anat. Entwickl. Berlin **102** 1924 pp. 311–323.

392.—Marchesini, R. Sulle origini delle piastrine del sangue. Riv. Biol. Roma **5** 1923 pp. 615–625 3 plates.

393.—Marchlewski, T. Beitrag zur Kenntnis spät mittelalterlicher Haustiere von Sudwestpolen. Bul. Intern. Acad. Pol. Cracovie **1923** 1924 pp. 11–14.

394.—Marchlewski, M. T. Über quartäre Pferde aus Böhmen und Polen. Bul. Intern. Ac. Pol. Cracovie **1924** B pp. 501–514 3 figs.

395.—Marelli, C. A. Elenco sistemático de la fauna de la Provincia de Buenos Aires (Procordados y Vertebrados). Extr. Mem. Ministerio de Obras Publicas Buenos Aires for **1922–23** 1924 pp. 536–682 [Mam. pp. 666–682].

396.—Marinelli, W. Untersuchungen über die Funktion des Gebisses der Entelodontiden. Palaeont. Zs. Berlin **6** 1924 pp. 25–42 5 figs.

397.—Martino, V. et E. Contributions à la classification et à la distribution géographique des mammifères de la Steppe des Kirguises. Ann. Mus. Zool. Petrograd **21** 1916 pp. 269–301. [Russian.]

398.—Masurovsky, B. A study of the effects of pumpkin seeds on the growth of Rats. J. Agric. Res. Washington **27** 1924 pp. 39–42.

399.—Matthew, W. D. A new link in the ancestry of the horse. Amer. Mus. Nov. New York no. **131** 1924 pp. 1–2.

400.—Matthew, W. D. Third contribution to the Snake Creek fauna. Bul. Amer. Mus. N. H. New York **50** 1924 pp. 59–210 63 figs.

401.—Matthew, W. D. and **Granger,** W. New Carnivora from the Tertiary of Mongolia. Amer. Mus. Nov. New York no. **104** 1924 pp. 1–9 7 figs.

402.—Matthew, W. D. and **Granger,** W. New Insectivores and Ruminants from the Tertiary of Mongolia, with remarks on the correlation. Amer. Mus. Nov. New York, no. **105** 1924 pp. 1–7 3 figs.

403.—Maxwell, M. Stalking Big Game with a camera in Equatorial Africa. Pp. xxii + 202 119 pls. London (Medici Soc.) 1924 4to.

Mayet, L. *vide* Stefanescu.

404.—Meissen, M. Die Schilddrüse beim Zwerghund. Zs. ges. Anat. München 1 Abt. **70** 1924 pp. 598–600.

405.—Mendeléeff, P. Influence des ions metalliques sur la croissance des tissus embryonnaires in vitro et in vivo. Ann. Bull. Soc. Roy. Sci. Méd. Nat. Bruxelles **1924** pp. 164–173.

406.—Mettam, R. W. M. An abnormality of the Omasum of an Ox pp. 390–391. An abnormality of the right cardiac atrium of the Horse pp. 392–395. S. Afr. J. Sci. Johannesburg **20** 1923.

407.—Mettam, R. W. M. An abnormality of the petrous temporal bone of a calf pp. 384–387; an interesting abnormality in the structure of the liver of an ox pp. 388–391. S. Afr. J. Sci. Johannesburg **21** 1924.

408.—Miller, F. W. Coues Porcupine in Colorado. J. Mamm. Baltimore **5** 1924 p. 134.

409.—Miller, F. W. The range of *Cryptotis parva* (Say). J. Mamm. Baltimore **5** 1924 p. 199.

410.—Miller, G. S. jr. The characters and probable history of the Hawaiian Rat. Bull. Bernice Pauahi Museum Honolulu H. I. No. **14** 1924 pp. 1–6.

411.—Miller, G. S. List of North American recent Mammals, 1923. Bul. U. S. Nat. Mus. Washington no. **128** 1924 pp. xvi + 673.

412.—Miller, G. S. Some hitherto unpublished photographs and measurements of the Blue Whale. Proc. U. S. Nat. Mus. Washington **66** art. 7 1924 pp. 1–4 9 pls.

413.—Miller, G. S. A second instance of the development of Rodent-like incisors in an Artiodactyl. Proc. U. S. Nat. Mus. Washington **66** art. 8 1924 pp. 1–4 1 pl.

414.—Miller, G. S. A Pollack Whale from Florida presented to the National Museum by the Miami Aquarium Association. Proc. U. S. Nat. Mus. Washington **66** art. 9 1924 pp. 1–15 22 pls.

415.—Minett, F. C. Two cases of malformation of the heart in the Horse. J. Comp. Path. Ther. Edinburgh **37** 1924 pp. 154–158 2 figs.

416.—Mohr, J. C. van der M. Ueber einige sog. Rattenkönige. Treubia Batavia **5** 1924 pp. 374–378 2 pls.

417.—Möllenhoff, E. Untersuchungen über Hämoglobin-Kristalle von Säugetieren. Zs. Biol. München **79** 1923 pp. 93–112 2 pls.

418.—Monakow, C. von. Sobre los centros de origen del nervio óptico y sus relaciones con la corteza cerebral. Trab. Labor. Invest. Biol. Univ. Madrid **18** 1920 pp. 261–268.

419.—Monod, T. Note sur la présence du *Monachus albiventer* Bodd. sur la côte Saharienne. Bul. Muséum Paris **1923** pp. 555–557.

420.—Montagu, J. On the remains of Fen Beaver in the Sedgwick Museum. 1. Skulls and teeth. Proc. Zool. Soc. London **1924** pp. 1081–1086 3 pls.

421.—Montagu, J. On the burrow of the Rodent, *Spalax* (*Mesospalax*). Proc. Zool. Soc. London **1924** pp. 1153–1160 2 pls. 4 text-figs.

422.—Monterosso, B. Su di un Mostro doppio (Sicefalo-Sinoto) di Maiale. Note anatomiche. Atti Acc. Gioenia Catania (5) **12** 1920 mem. no. 16 pp. 1–24 1 pl. 1 text-fig.

423.—Moore, C. R. The behavior of the germinal epithelium in testis grafts and in experimental cryptorchid testes (Rat and Guinea-Pig). Science New York **59** 1924 pp. 41–44.

424.—Moore, C. R. and Quick, W. J. Properties of the gonads as controllers of somatic and psychical characteristics. VI.—Testitular reactions in experimental cryptorchism pp. 269–316 12 figs. VII.—Vasectomy in the Rabbit pp. 317–358 4 figs. Amer. J. Anat. Philadelphia **34** 1924.

425.—Moran, J. Killer Whales at Green Island Lighthouse. Canad. Field-Nat. Ottawa **38** 1924 pp. 84–85.

426.—Moulin, F. de. Die oberflachlichen Rücken- und Halsmuskeln des indischen Büffels und des Zebus. Anat. Anz. Jena **58** 1924 pp. 460–471 4 figs.

427.—Morgera, A. Ricerchi sulla morfologia e fisiologia della glandola cecale (Appendice digitiforme) degli *Scyllium* e sulla funzione del processo vermiforme dell'Uomo e dei Mammiferi. Arch. Zool. Ital. Napoli **8** 1916 pp. 121–157 1 pl. 3 text-figs.

428.—Morton, D. J. The peroneus tertius muscle in Gorillas. Anat. Rec. Philadelphia **27** 1924 pp. 323–328 2 figs.

429.—Mott, Sir F. A study by serial sections of the structure of the larynx of *Hylobates syndactylus* (Siamang Gibbon). Proc. Zool. Soc. London **1924** pp. 1161–1170 5 pls.

430.—Mulon, P. et Duboc, T. Les secretions de la glande de Harder du Lapin. C.R. Soc. Biol. Paris **91** 1924 pp. 1376–1378 2 figs.

Murphey, H. S. *vide* McNutt.

431.—Nabeya, D. A study in the comparative anatomy of the blood-vascular system of the internal ear in Mammalia and in Homo (Japanese). Act. Schol. Med. Univ. Imper. Kioto **6** 1923 pp. 1–132 16 pls. 13 photos. 18 text-figs.

Nakamura, H. *vide* Bertrand.

432.—Nakanishi, M. Innvervation of the pyloric sphincter of the Rat. J. Physiol. Cambridge 58 1924 pp. 480–484.

433.—Neuville, H. Sur la foie de l'Hippopotame. Bul. Muséum Paris **1924** pp. 30–36 2 figs.

434.—Nassonov, D. Das Golgische Binnennetz und seine Beziehungen zu der Secretion (Fortzetsung). Morphologische und experimentelle Untersuchungen an einigen Saugetierdrüsen. Arch. mikrosk. Anat. Entwickl. Berlin **100** 1924 pp. 433–472 3 pls.

Neuville, H. *vide* Derscheid.

435.—Niceforo, M. Nueva especie de ursideos colombianos. Bol. Soc. Colombiana Cien. Nat. Bogota **13** 1924 pp. 113–117 1 pl.

436.—Niedoba, T. Ueber den Haarstrich einiger Doppelmissbildungen des Rindes. Anat. Anz. Jena **58** 1924 pp. 564–572 1 fig.

437.—Niezabitowski, E. de L. Das fossile Rentier in Galizien sowie seiner Rassen- und Art-Zugehorikeit. Bul. Intern. Acad. Krakow **1914B** pp. 56–72 2 pls.

Niezabitowski, E. de L. *vide* Adametz.

Noble, G. K. *vide* Gregory.

438.—Noël, R. et **Accoyer,** H. Sur la structure de l'épithélium des plexus choroïdes chez le très jeune Rat. C.R. Soc. Biol. Paris **90** 1924 pp. 772–774 1253–1254.

439.—Nordmann, V. Nyere Fund af Elefant-Levninger i Danmark. Medd. Geol. København **6** 1921 no. 4 pp. 1–17 3 figs.

440.—Ognev, S. I. Rodentia of the North Caucasus. [Sep. Publ.] Pp. 1–61 Rostov-on-Don 1924 8vo. [In Russian.]

441.—Огнев, С. И. [Ognev, S. I.]. Новые и мало изученные виды русских грызунов. [New and less known species of Russian rodents.] Бюлл. Моск. Общ. Исп. Прир. [Bull. Soc. Natur. Moscou date ? sep. pub. pp. 67–98 28 figs. [Russian with diagn. in English.]

442.—Огнев, С. И. [Ognev, S. I.]. Замечагельный зверек. [A remarkable small mammal.] Природа и Охота на Украине, Харьков [Nature and Sport in Ukraine Kharkov] pp. 1–2 1924.

443.—Огнев, С. И. [Ognev, S. I.]. О медведях, водящихся в России. [On the Bears occurring in Russia.] Природа и Охота на Украине, Харьков [Nature and Sport in Ukraine Kharkov] pp. 1–2 1924.

444.—Ohmori, D. Ueber die Entwicklung der Innervation der Genetalapparate als peripheren Aufnahmeapparat der genatalen Reflexe. Zs. ges. Anat. München 1 Abt. **70** 1924 pp. 347–410 19 figs.

445.—Okamoto, K. Ueber das Foramen transversarium und die Eigentümlichkeit des Querfortsatzes am 7 Halswirbel. Anat. Anz. Jena **58** 1924 pp. 401–430 13 figs.

446.—Oldham, C. Barbastelle Bat in Hertfordshire. Trans. Herts. Nat. Hist. Soc. St. Albans **17** 1923 p. 295.

447.—Oliver, W. R. B. Strap-toothed Whale stranded at Kaitawa Point, entrance to Porirua Harbour pp. 187–188 1 fig. Stranded Blackfish at Marsden Point pp. 188–189 photo. N. Zeal. J. Sci. Techn. Wellington **7** 1924.

448.—Osborn, H. F. *Eudinoceras,* Upper Eocene Amblypod of Mongolia. Amer. Mus. Nov. New York no. **145** 1924 pp. 1–5 2 figs.

449.—Osborn, H. F. *Andrewsarchus,* giant Mesonychid of Mongolia. Amer. Mus. Nov. New York no. **146** 1924 pp. 1–5 3 figs.

450.—Osborn, H. F. *Cardurcotherium ardynense,* Oligocene, Mongolia. Amer. Mus. Nov. New York no. **147** 1924 pp. 1–4 3 figs.

451.—Osborn, H. F. *Serridentinus* and *Baluchitherium,* Lohformation, Mongolia. Amer. Mus. Nov. New York no. **148** 1924 pp. 1–5 2 figs.

452.—Osborn, H. F. Asiatic center of Mammalian Dispersion. Pan-Amer. Geol. Des Moines **41** 1924 pp. 271–276.

453.—Oslund, R. M. Vasectomy and rejuvenescence. Science New York **60** 1924 pp. 419–421.

454.—Ozorio de Almeida A. et **Fialho,** B. de A. Température et métabolism du Tatou (*Tatusia novemcincta*). C.R. Soc. Biol. Paris **90** 1924 pp. 734–735.

455.—Ozorio de Almeida, A. et **Fialho,** B. de. Metabolisme, temperature et quelques autres déterminations physiologiques faites sur le Paresseux (*Bradypus tridactylus*). C. R. Soc. Biol. Paris **71** 1924 pp. 1124–1125.

456.—Ozorio de Almeida, A. et **Galvao,** P. Température et métabolisme du Ouriço (*Coendou villosus*). C. R. Soc. Biol. Paris **91** 1924 p. 1126.

457.—Ozorio de Almeida, O. et **Piéron,** H. Sur le rôle de la peau dans le maintien du tonus musculaire chez les Mammiféres. C.R. Soc. Biol. Paris **90** 1924 pp. 1402–1404; also **91** pp. 878–880.

Ozorio de Almeida, A. *vide* Gley.

458.—Pace, D. Di un singolare sdoppiamento del nodo di Keith e Flack nel cuore di agnello. Arch. Ital. Anat. Embriol. Firenze **21** 1924 pp. 97–113 7 figs.

459.—Painter, T. S. A technique for the study of Mammalian chromosomes. Anat. Rec. Philadelphia **27** 1924 pp. 77–86 2 figs.

460.—Painter, T. S. Studies in Mammalian spermatogenesis. III. The fate of the chromatic nucleolus in the Opossum pp. 197–227 42 figs. IV. The chromosomes of the Horse pp. 229–247 27 figs. V. The sex chromosomes of Monkeys pp. 433–461 43 figs. J. Exp. Zool. Philadelphia **39** 1924.

461.—Palmer, R. W. An incomplete skull of *Dinotherium*, with notes on the Indian forms. Palaeont. Ind. Calcutta **7** mem. 4 1924 pp. 1–14 3 pls.

462.—Papilian, V. et **Stanescu-Jippa,** V. Recherches expérimentales sur la circulation du liquid céphalorachidien. C.R. Soc. Biol. Paris **91** 1924 pp. 1465–1466.

463–4.—Parat, M. Contribution à l.histo-physiologie des organs digestifs de l'embryon. L'apparition corrélative de la cellule de Kultschitzky et de la sécrétine chez l'embryon. C.R. Soc. Biol. Paris **90** 1924 pp. 1023–1024.

465.—Parkes, A. S. Studies on the sex-ratio and related phenomena. V.—The sex-ratio in mice, and their variation. Brit. J. Exper. Biol. Edinburgh **1** 1924 pp. 323–334.

466.—Parkes, A. S. Fertility in Mice. Brit. J. Exper. Biol. Edinburgh **2** 1924 pp. 21–31.

467.—Parkes, A. S. On the migration of ova in the Rabbit. J. Physiol. Cambridge **59** 1924 pp. 357–360.

468.—Parkes, A. S. The factors governing the Mammalian Sex-ratio. Science Progress London **18** 1924 pp. 426–435.

469.—Paszlavszky, J. Mammalia in : Fauna Regni Hungariae ed. R. Soc. Sci. Nat. Hung. pp. 1–44 Budapest 1918 l. 8vo. [Magyar and Latin.]

470.—Paugger, J. Beitrag zur Kenntnis der Halshautmuskulatur bei Primates. Zs. Morph. Stuttgart **23** 1923 pp. 185–226 15 figs.

471.—Pearson, E. S. Congenetal eye anomalies in albino mice. Nature London **114** 1924 p. 433.

472.—Peirson, L. G. Notes on Mammals etc. in the Marlborough district. Rep. Marlborough Coll. N. H. Soc. **72** 1924 pp. 42–44.

473.—Penrose, C. B. Removal of the testicle in a Sika Deer followed by deformity of the antler on the opposite side. J. Mamm. Baltimore **5** 1924 pp. 116–118 5 photos.

474.—Perman, E. Anatomische Untersuchungen über die Herznerven bei den höheren Säugetieren und beim Menschen. Zs. ges. Anat. München Abt. 1 **71** 1924 pp. 382–457 23 figs.

475.—Petersen, H. Ueber den funktionellen Bau der Flügelknochen der Fledermaus (*Vespertilio murimus*) und über das Einknicken von Röhren bei Biegung (vi. Beitrag zur tierischen Mechanik). Arch. mikrosk. Anat. Entwickl. Berlin **102** 1924 pp. 406–425 19 figs.

476.—Petit, G. Remarques sur la morphogologie comparée du rein du boeuf et du rein du buffle (*Bubalus caffer* Sparmann). Arch. Anat. Hist. Embr. Strasbourg **3** 1924 pp. 491–501 3 figs.

477.—Petit, G. Sur le Dugong de Madagascar. Notes ethnographiques. Bul. Mem. Soc. d'Anthrop. Paris (7) **4** 1923 pp. 75–83.

478.—Petit, G. Notes sur les Dugongs des côtes de Madagascar. Bul. Muséum Paris **1924** pp. 124–127.

479.—Petit, G. Remarques sur la lobation du rein des Lamantins. C.R. Acad. sci. Paris **178** 1924 pp. 244–246.

480.—Petit, G. Sur la morphogénie du rein des Siréniens. C.R. Acad. Sci. Paris **178** 1924 pp. 2197–2200.

481.—Petcoff, P. Sur l'étude de la réunion des frontalia et nasalia chez l'*Ovis aries* L. Trav. Soc. Bulg. Sci. Nat. Sophia no. **11** 1924 pp. 113–118 4 figs. [Bulgar.]

482.—Petcoff, P. L'ossification des extrêmités chez les nouveaux nés *Mus musculus* L. Trav. Soc. Bulg. Sci. Nat. Sophia **11** 1924 pp. 131–142 2 pls.

483.—Petkow, P. Untersuchungen über die Haemoglobinbestimmung und die Blutkörperschen bei einigen Haussäugetieren. Trav. Soc. Bulg. Sci. Nat. Sophia no. **10** 1923 pp. 1–49. [Bulgar. with German rés.]

484.—Peterson, O. A. Discovery of fossil Mammals in the Brown's Park formation of Moffatt County, Colorado. Ann. Carnegie Mus. Pittsburgh **15** 1924 pp. 299–304 3 figs.

485.—Petrie, G. F. and others. A report on plague investigations in Egypt. J. Hygiene London **23** 1924 pp. 117–150 map and charts.

486.—Pfuhl, W. Strukturelle Eigentümlichkeiten der Maulwurfsleber und ihre kausale Abhängigkeit von den besonderen physiologischen Bedingungen des Leberkreislaufs bei diesem Tiere. Zs. ges. Anat. München Abt 1 **72** 1924 pp. 545–555 3 figs.

487.—Phillips, W. W. A. Guide to the Mammals of Ceylon. Spolia Zeylan. Colombo **13** 1924 pp. 1–63 5 figs.

488.—Pic, M. Sur les Sangliers. Bul. Soc. Zool. Paris **49** 1924 pp. 293–296.

Piéron, H. *vide* Ozorio.

489.—Pictet, A. et **Ferrero,** A. Ségrégation dans un croisement entre espèces de Cobayes (*Cavia aperea* par *C. cobaya*). C.R. Soc. Phys. Hist. Nat. Genève **41** 1924 pp. 90–94.

490.—Pittman, H. H. Notes on the feeding habits of the Little Brown Bat (*Myotis lucifugus*). J. Mamm. Baltimore **5** 1924 pp. 231–232 1 pl.

491.—Pocock, R. I. A new genus of Monkeys (*Presbytiscus*). Proc. Zool. Soc. London **1924** pp. 331–332.

492.—Pocock, R. I. Some external characters of *Orycteropus afer*. Proc. Zool. Soc. London **1924** pp. 697–706 5 text-figs.

493.—Pocock, R. I. The external characters of the Pangolins (Manidae). Proc. Zool. Soc. London **1924** pp. 707–723 8 text-figs.

494.—Pocock, R. I. The external characters of the South American Edentates. Proc. Zool. Soc. London **1924** pp. 983–1031 24 figs.

Pocock, R. I. *vide* Lankester.

495.—Pohl, H. Ueber das Epithel in den Samenblasen des Meerschweinchens. Anat. Anz. Jena **57** 1924 pp. 266–270 2 figs.

496.—Policard, A. Remarques sur la structure de la cellule adipose des Mammifères. C.R. Soc. Biol. Paris **91** 1924 pp. 167–169.

497.—Poljak, S. Die Struktureigentümlichkeiten des Rückenmarkes bei den Chiropteren. Zugleich ein Beitrag zu der Frage über die spinalen Zentren des Sympathecus. Zs. ges. Anat. München Abt. 1 **74** 1924 pp. 509–576 28 figs.

498.—Ponder, E. On the balloon-like structure of the Mammalian erythrocite. Proc. R. Soc. London Ser. B **97** 1924 pp. 138–148.

499.—Pontier, G. Éléphants fossiles de Grand Bretagne. Nature Paris no. **2641** Nov. 1924 pp. 305–309 7 figs.

500.—Popa, G. T. Structure fonctionnelle de la dure-mère crânienne, avec considérations générales sur les facteurs mécaniques crâniens chez les vertébrés en général et chez l'homme en particulier. Ann. sci. Univ. Jassy **13** 1924 pp. 119–192 10 pls.

501.—Prater, S. H. The Slow Loris (*Nycticebus coucang*). J. Bombay N. H. Soc. **30** 1924 pp. 215–217 fig.

502.—Punnett, R. C. on the "Japanese" Rabbit. J. Genetics Cambridge **14** 1924 pp. 231–240.

Putnam, T. J. *vide* Wislocki.

503.—Przibram, H. und **Wiesner,** B. T. Erhöhung der Körpertemperatur junger Wanderratten (*Mus decumanus*) über den Normalwert und ihr Einfluss auf die Schwanzlänge. Die Umwelt des Keimplasmas X. Arch. mikrosk. Anat. Entwickl. Berlin **102** 1924 pp. 731–740.

Quick, W. J. *vide* Moore.

504.—Quix, F. H. and **Werndly,** L. V. H. C. The otolithic pressure as a function of the position of the cranium. Verh. K. Akad Wet. 2e sect. Amsterdam **23** no. 3 1924 pp. 1–38.

505.—Redenz, E. Versuch einer biologischen Morphologie des Nebenhodens. Arch. mikr. Anat. Entwickl. Berlin **103** pp. 593–628 8 figs.

Redenz, *vide* Lanz.

506.—Reichenau, W. von. Beiträge zur näheren Kenntnis fossiler Pferde aus Deutschem Pleistozän inbesondere über die Entwicklung und die Abhaustadien des Gebisses von Hochterrassenpferd (*Equus mosbachensis* v. R.). Abh. Geol. Landesanst. Darmstadt **7** 1915 pp. 1–155 14 pls.

507.—Remane, A. Einige Bemerkungen über *Prohylobates tandyi* R. Fourtau und *Dryopithecus moglarensis* R. Fourtau. Centralb. Min. Stuttgart for **1924** pp. 220–223.

508.—Remane, A. Das Stirnahtproblem. (Eine Entgegnung an Bolk.). Zs. Morph. Stuttgart **23** 1923 pp. 153–178 2 figs.

509.—Rényi, G. Untersuchungen über Flimmerzellen. Zs. ges. Anat. München Abt. 1 **73** 1924 pp. 338–357 21 figs.

510.—Retterer, E. Évolution des testicules graffés. Bul. Soc. Philom. Paris (10) **13** 1924 pp. 22–49 10 figs.

511.—Revilliod, P. Note préliminaire sur le *Canis morenoi* Lydekker. C.R. Soc. Phys. Hist. Nat. Genève **41** 1924 pp. 11–12.

512.—Riabinin, A. Les lions fossiles de la chaîne de l'Oural et de la région du Volga. Mém. Com. Géol. Petrograd livr. **168** 1919 pp. 1–24 5 pls. 8 text-figs. 1 map.

513.—Ribeiro, A. de M., Alguns factos e mais dois Simios novos da nossa fauna. Bol. Mus. Nac. Rio de Janeiro **1** 1924 pp. 211–215.

514.—Riese, W. Zur vergleichenden Anatomie der striofugalen Fasenung. Anat. Anz. Jena **57** 1924 pp. 487–494 5 figs.

515.—Ringström, T. Nashörner der Hipparion-Fauna Nord-Chinas. Palaeont. Sinica ser. c **1** fasc.4 1924 pp. 1–156 12 pls. 92 text-figs.

516.—Rio-Hortega, P. del Sur la configuration et la structure des néphrocytes dans les divers segments du tube urinifère. C.R. Soc. Biol. Paris **91** 1924 pp. 831–833.

517.—Ritchie, J. Observations on a Pilot Whale stranded in the Firth of Forth. Scot. Nat. Edinburgh **1924** pp. 37–43 2 photos.

518.—Ritchie, J. White-beaked Dolphin in Firth of Forth. Scot. Nat. Edinburgh **1924** p. 75.

Ritchie, M. I. F. *vide* Duerden.

519.—Roberts, A. Some additions to the list of South African Mammals. Ann. Transvaal Mus. Pretoria **10** 1924 pp. 59–76 2 figs.

520.—Roberts, J. A. F. Colour inheritance in Sheep. 1.—Black colour and Badger-face pattern in Welsh Mountain Sheep. J. Genetics Cambridge **14** 1924 pp. 367–374 2 pls.

521.—Rogers, F. T. An experimental study of the cerebral physiology of the Virginian Opossum. J. Comp. Neur. Philadelphia **37** 1924 pp. 265–315.

522.—Roman, F. Contribution à l'étude de la Faune de Mammiféres des Littorinenkalk (Oligocène supérieur) du bassin de Mayence. Les Rhinocéros. Trav. Lab. Géol. Lyon fasc. **7** mem. 6 1924 pp. 1–54 5 pls. 25 text-figs.

523.—Romer, A. S. A radial exostosis in a fossil Canid *Daphoenus*. Amer. J. Sci. New Haven (5) **8** 1924 pp. 235–240 figs.

524.—Romer, A. S. The lesser trochanter of the Mammalian femur. Anat. Rec. Philadelphia **28** 1924 pp. 95–102 3 figs.

525.—Ruttledge, R. F. Note on the distribution of the Squirrel in Ireland. Irish Nat. Dublin **33** 1924 pp. 73–74.

526.—St. Konsilow, D. Notizen über den Befund von *Capra aegagrus* in Parnar-Dag (Thracien). Trav. Soc. Bulg. Sci. Nat. Sophia no. **10** 1923 pp. 176–180 2 figs. [Bulgarian with German rés.].

St. Quintin, W. H. *vide* Watt.

527.—Salazar, A. L. Sur l'existence de blocs tannophiles géants, dans la cellule lutéinique de la lapine. Anat. Rec. Philadelphia **28** 1924 pp. 295–303 1 pl.

528.—Salazar, A. L. Sur l'existence de granulations paranucléaires dans les cellules lutéinique de la Lapine, colorable électivement par le tannin-fer pp. 221–222 fig. Sur le rôle endocrine ou trophique de la glande interstitielle

ovarienne pp. 223–224. A propos d'une observation d'Henneguy sur l'influence mutuelle des mitoses pp. 225–226. C.R. Soc. Biol. Paris **91** 1924.

Salzer, G. *vide* Kuntschik.

529.—Sandford, K. S. The river-gravels of the Oxford district. Appendix 1. Synopsis of the Pleistocene Vertebrata of the Oxford district. Q. J. Geol. Soc. London **80** 1924 pp. 166–168.

530.—Sandison, J. C. A new method for the microscopic study of living growing tissues by the introduction of a semi-transparent chamber in the rabbit's ear. Anat. Rec. Philadelphia **28** 1924 pp. 281–287.

531.—Schaffer, J. Ueber Anal- und Circumanaldrüsen. 1 Mitteilung. Geschichtlicher Ueberblick. Zs. wiss. Zool. Leipzig **122** 1924 pp. 79–96.

532.—Scharff, R. F. On the breeds of Dogs peculiar to Ireland and their origin. Irish Nat. Dublin **33** 1924 pp. 77–95.

533.—Schaub, S. Neue und wenig bekannte Cavicornier von Senèze. Eclogae Geol. Helvet. Bâle **18** 1923 pp. 281–295 5 figs.

534.—Schauder, W. Bisher unbekannte Missbildung der Arteria coronaria sinestra des Rindes. Anat. Anz. Jena **58** 1924 pp. 540–552 5 figs.

535.—Schauder, W. Die fatale Entwicklung der "Sehnenmuskeln" des Pferdes. Arch. mikrosk. Anat. Entwickl. Berlin **102** 1924 pp. 211–262 38 figs.

536.—Schauder, W. Anatomische und metrische Untersuchungen über die Muskeln der Schultergliedmasse des Pferdes. Arch. Tierheilk. Berlin **47** 1922 pp. 237–248.

537.—Schauder, W. Anatomische und metrische Untersuchungen über die Muskeln der Schultergliedmasse des Pferdes. Zs. ges. Anat. München Abt. 1 **71** 1924 pp. 559–637 20 figs.

538.—Scheffer, T. H. Notes on the breeding habits of *Peromyscus*. J. Mamm. Baltimore **5** 1924 pp. 258–260.

Schinz, H. R. *vide* Küpfer.

539.—Schinz, R. und **Slotopolsky,** B. Ueber die Wirkung der Rontgenstrahlen auf den in der Entwicklung begriffenen Hoden. Arch. mikrosk. Anat. Entwickl. Berlin **102** 1924 pp. 363–378 8 figs.

540.—Schlesinger, G. Die Mastodonten der Budapester Sammlungen. Untersuchungen über Morphologie Phylogenie, Ethologie und Stratigraphie Europäischer Mastodonten. Geol. Hung. Budapest **2** fasc 1 1922 pp. 1–282 22 pls. 3 text-figs.

541.—Schlosser, M. Ueber die systematische Stellung jungtertiärer Cerviden. Centralb. Min. Stuttgart for **1924** pp. 634–640.

542.—Schlosser, M. Tertiary Vertebrates from Mongolia. Palaeont. Sinica Peking ser. c **1** fasc. 1 1924 pp. 1–119 6 pls. 5 text-figs. [Mammals pp. 2–93].

543.—Schlosser, M. Fossil Primates from China. Palaeont. Sinica Peking ser C. **1** fasc 2 1924 pp. 1–14 1 pl.

544.—Schmidt, W. J. Ueber das Dentin von *Bradypus tridactylus*. Anat. Anz. Jena **58** 1924 pp. 97–107 6 figs.

545.—Schmidtgen, O. *Felis pardus* spec. L. aus dem Mosbacher Sand. Jahrb. Ver. Natk. Wiesbaden **74** 1922 pp. 51–58 2 figs.

546.—Schultz, A. H. Observations on *Colobus* fetuses. Bul. Amer. Mus. N. H. **49** 1924 pp. 443–457 5 figs.

547.—Schultz, A. H. Preparation and preservation of anatomical and embyological material in the field. J. Mamm. Baltimore **5** 1924 pp. 16–24 2 figs.

548.—Schultz, A. H. Fetuses of the Guiana Howling Monkey. Zoologica New York **3** 1921 pp. 243–262 24 figs.

549.—Schultz, W. Darstellung versteckter Erbanlagen ohne Kreuzung durch Aktivierung von Farbungsgenen bei Albinos der Russenkaninchengruppe. Zs. indukt. Abstammgslehre Leipzig **35** 1924 pp. 238–256.

550.—Schreitmüller, W. Saügetiere in: Beiträge zur Fauna Nord-und Nordostfrankreichs und der angrenzenden Gebiete Belgiens. Arch. Naturg. Berlin **89A** Hft. 12 1924 pp. 169–181 4 figs.

551.—Schumacher, O. und **Lebzelter,** V. Zur Kenntnis der Oberschenkelmuskulatur bei *Mormon sphinx.* Zs. ges. Anat. München Abt. 1 **71** pp. 282–303 7 figs.

552.—Schumacher, S. Eine "Lippenplate" beim Eichhörnchen (*Sciurus vulgaris* L.). Anat. Anz. Jena **58** 1924 pp. 75–80 3 figs.

553.—Schumacher, S. Der Bau der Wangen (inbesondere deren Innenbekleidung) vergleichen mit dem der Lippen. Zs. ges. Anat. München Abt. 1 **73** 1924 pp. 247–276 17 figs.

554.—Schwalbe, G. Studien über das Femur von *Pithecanthropus erectus* Dubois. Zs. Morph. Stuttgart **21** 1921 pp. 290–360.

555.—Schwarz, E. On the evolution and radiation of Mammalian faunae. Act. Zool. Stockholm **5** 1924 pp. 393–423.

556.—Sclavounos, G. Des enveloppes du follicule de l'oeuf des Mammifères et de ses voies nutritives. Arch. Anat. Hist. Embr. Strasbourg **3** 1924 pp. 1–20 5 pls.

557.—Scott, H. H. and **Lord,** C. E. Studies of Tasmanian Mammals, living and extinct. VIII.—Pleistocene Mammals from King Island pp. 1–3 fig. IX.—*Nototherium victoriae* pp. 4–5. X.—Giant Wallaby pp. 6–8. Notes on a mutilated femur of *Nototherium* pp. 56–57 1 fig. Papers and Proc. R. Soc. Tasmania, Hobart for **1923** 1924.

Scott, H. H. *vide* Lord.

558.—Sergi, G. La struttura soprorbitaria negli Antropoidi e nell'Uomo. Arquivo Anat. Anthrop. Lisboa **8** 1924 pp. 413–419 3 figs.

Sékoulitch *vide* Lafite-Dupont.

559.—Serguéev, A. *Dinotherium gigantissimum* Stef. des environs de Krivoi-Rog. Bul. Com. Géol. Petrograd **33** 1914 pp. 561–589 2 pls. [Russian and French rés.].

560.—Shapiro, B. On the epithelial fibres in the skin of Mammals. Q. J. Microsc. Sci. London **68** 1924 pp. 101–145 1 pl. 17 text-figs.

561.—Shaw, W. T. The home-life of the Columbian Ground Squirrel. Canad. Field-Nat. Ottawa **38** pp. 128–130 151–153 6 photos.

562.—Shaw, W. T. Alpine life of the Heather Vole (*Phenacomys olympicus*). J. Mamm. Baltimore **5** 1924 pp. 12–15 3 pls.

563.—Shaw, W. T. The Red-backed Mouse (*Evotomys gapperi saturatus*) as a tree inhabiter. J. Mamm. Baltimore **5** 1924 pp. 268–269.

564.—Sheak, W. H. Some further observations on the Chimpanzee. J. Mamm. Baltimore **5** 1924 pp. 122–129.

565.—Sheldon, E. F. The so-called hibernating gland in Mammals: a form of adipose tissue. Anat. Rec. Philadelphia **28** 1924 pp. 331–347 2 pls.

566.—Shufeldt, R. W. The skull of the Wolverene (*Gulo luscus*). J. Mamm. Baltimore **5** 1924 pp. 189–193 2 pls.

567.—Silver, J. The European Hare (*Lepus europaeus* Pallas) in North America. J. Agric. Res. Washington **28** 1924 pp. 1133–1137.

568.—Silver, J. Rodent enemies of fruit and shade trees. J. Mamm. Baltimore **5** 1924 pp. 165–173.

569.—Sinclair, W. J. The faunas of the concretionary zones of the Oreodon beds, White River Oligocene. Proc. Amer. Phil. Soc. Philadelphia **63** 1924 pp. 94–133 1 pl. 9 text-figs.

Slotopolsky, B. *vide* Schinz.

570.—Smith, C. The origin and developement of the Carotid body. Amer. J. Anat. Philadelphia **34** 1924 pp. 87–131 3 pls. 12 text-figs.

571.—Smith, J. R. The Reindeer industry in America: A study of a new industry and also of the origins of geographic error. Scot. Geogr. Mag. Edinburgh **40** 1924 pp. 74–88.

Smith, S. *vide* Lankester.

572.—Snyder, L. L. Some details on the life-history and behavior of *Napaeozapus insignis abietorum* (Preble). J. Mamm. Baltimore **5** 1924 pp. 233–237 2 figs.

573.—Sobotta, J. Beiträge zur Forschung des Eies der Säugetiere mit besonderer Berucksichtigung der Frage der Determination der Forschung. 1. Die Forschung des Eies der Maus (*Mus musculus*). Zs. ges. Anat. München Abt. 1 **72** 1924 pp. 94–116 7 figs.

574.—Sonntag, C. F. The morphology and evolution of the Apes and Man. Pp. xi + 364 57 figs. London (Bale) 1924 sm. 8vo.

575.—Sonntag, C. F. On the anatomy, physiology and pathology of the Orang-Outan. Proc. Zool. Soc. London **1924** pp. 349–450 pls. i–iv 30 text-figs.

576.—Sonntag, C. F. The comparative anatomy of the tongues of the Mammalia. X. Rodentia pp. 725–741 8 text-figs. XI. Marsupialia and Monotremata pp. 743–755 6 text-figs. Proc. Zool. Soc. London **1924.**

Soparkar, M. B. *vide* Liston.

577.—Sowerby, A. de C. A new Cat from West China. China J. Sci. Arts Shanghai **2** 1924 pp. 352–353.

578.—Sprenkel, H. B. van der. The hypoglossal nerve in an embryo of *Erinaceus europaeus.* J. Comp. Neur. Philadelphia **36** 1924 pp. 219–272 7 figs.

579.—Stach, J. Über die schwarze Morphe des Hamsters, *Cricetus cricetus* L. m. *niger.* Beitrag zur Frage der Fixierung von abgeänderten Formen und der Verbreitung des Hamsters. Bul. Intern. Acad. Krakow for **1919 B** 1920 pp. 1–9 map.

Stanescu-Jippa, V. *vide* Papilian.

580.—Stauffer, C. R. The fossil Elephants of Minnesota. Science New York **60** 1924 pp. 40–41.

581.—Stead, D. G. Singapore Tigers. Singapore Nat. no. **3** 1924 pp. 8–9.

582.—Stechow, E. Biologsiche Beobachtungen in Lithauenen: Beitr. Natur. u. Kulturges. Lithauens. Abh. bayer. Ak. Wiss. München Suppl. Bd. **5** 1923 pp. 254–256 2 pls.

583.—Stefanescu, S. Sur le mécanisme de l'expulsion des molaires inférieurs des mastodontes et des eléphants. C.R. Acad. Sci. Paris **178** 1924 pp. 1486–1488.

584.—Stefanescu, S. Sur la phylogénie des éléphants. C.R. Acad. Sci. Paris **178** 1924 pp. 1836–1839; also Ch. **Deperet** et L. **Mayet** pp. 2031–2032.

585.—Stefanescu, S. Sur les anomalies apparentes des molaires d'éléphants et sur le nombre des lames de leurs couronnes. C.R. Acad. Sci. Paris **179** 1924 pp. 835–838.

586.—Stefanescu, S. Sur la presénce de l'*Elephas planifrons* et de trois mutations de l'*Elephas antiquus* dans les couches geologiques de Roumanie. C.R. Acad. Sci. Paris **179** 1924 pp. 1418–1419.

587.—Stehlin, H. G. Die oberpliocaene Fauna von Senèze (Haute-Loire). Eclogae Geol. Helvet. Bâle **18** 1923 pp. 268–281.

588.—Stehlin, H. G. *Rhizoplax poirrieri* Miller et Gidley und die Gebissformal der Spalacidae. Verh. Natf. Ges. Basel **34** 1923 pp. 233–263 15 text-figs.

589.—Stieve, H. Kastration durch Hitze mit nachfolgender Wucherung des Keimepithels. Zs. mikrosk.-anat. Forschung Leipzig **1** 1924 pp. 191–206 1 pl. 3 text-figs.

590.—Stiles, C. W. Zoological nomenclature: thirty-five generic names of Mammals. Nature London **114** 1924 p. 313; also Zool. Anz. Leipzig **60** 1924 p. 344.

Storer, T. I. *vide* Grinnell.

591.—Straelen, V. van. Sur les premieres restes de Phacochéres fossiles recueillies au Congo belge. Bul. Acad. roy. Bruxelles (5) **10** 1924 pp. 360–365 1 fig.

592.—Streeter, G. L. Single-ovum twins in the Pig. Amer. J. Anat. Philadelphia **34** 1924 pp. 183–194 5 figs.

593.—Stromer, E. Ergebnisse der Bearbeitung mitteltertiäre Wirbeltier-Reste aus Deutsch-Südwest Afrika. Sitz-ber. Ak. Wiss München **1923** pp. 253–270.

Strong, L. C. *vide* Little.

594.—Sumner, F. B. The stability of subspecific characters under changed conditions of environment. Amer. Nat. New York **58** 1924 pp. 481–505.

595.—Sumner, F. B. and **Swarth,** H. S. The supposed effects of the color tone of the background upon the coat color of Mammals. J. Mamm. Baltimore **5** 1924 pp. 81–113 7 pls.

596.—Swarth, H. S. Birds and Mammals of the Skeena river region of northern British Columbia. Univ. Cal. Publ. Zool. Berkeley **24** 1924 pp. 315–394 3 pls. 1 text-fig.

Swarth, H. S. *vide* Sumner.

597.—Sworder, G. H. The Hairless Bat (*Cheiromeles torquatus*). Singapore Nat. no. **3** 1924 pp. 10–11.

598.—Sziby, A. von. Die Ontogenese der idiotypischen (erbbildichen) Spaltbildungen des Auges, des Mikrophthalmus und der Orbitalsystem. Ein Beitrag zum Problem der Vererbung und Erwerhung des Kolobous. Zs. ges. Anat. München Abt. 1 **74** 1924 pp. 1–230 175 figs.

599.—Sztolcman, J. Materiaux pour l'histoire naturelle et pour l'historique du Bison d'Europe (*Bison bonasus* Linn.). Prace Zool. Muz. Przyro Warzawa **2** 1924 pp. 49–136 3 pls. [in French].

Tagaud, R. *vide* Lombard.

600.—Takakusu, S. . Untersuchungen über die gegenseitige Beeinflussung des Ovariums und des Uterus. Arch. mikrosk. Anat. Entwickl. Berlin **102** 1924 pp. 1–50 34 figs.

Tannenberg, G. de *vide* Jolly.

601.—Taylor, W. P. and **Loftfield,** J. V. G. Damage to range grasses by the Zuni Prairie Dog. Bul. U. S. Dept. Agr. Washington no. **1227** 1924 pp. 1–16 6 pls.

602.—Teilhard de Chardin, P. Les Mammifères de l'Eocène inférieur Français et leur Gisements. Ann. Paleont. Paris **10** 1921 pp. 1–8 **11** 1922 pp. 9–116 8 pls. 42 text-figs.

603.—Tello, J. F. Différences ontogénétiques entre les poils tactiles et les poils communs. C.R. Soc. Biol. Paris **91** 1924 pp. 833–834.

604.—Tello, J. F. Genèse des terminations motrices et sensitives. II. Terminaisons dans les poils de la souris blanche. Trav. Lab. Rech. Biol. Univ. Madrid **21** 1923 pp. 257–384 77 figs.

605.—Thelander, H. E. The course and distribution of the radix mesenaphelica trigemini in the Cat. J. Comp. Neur. Philadelphia **37** 1924 pp. 207–220 15 figs.

606.—Thomas, O. A new Pika from the Altai. Ann. Mag. N. H. London (9) **13** 1924 pp. 163–164.

607.—Thomas, O. On a new Fish-eating Rat from Bogotá. Ann. Mag. N. H. London (9) **13** 1924 pp. 164–165.

608.—Thomas, O. New South American small Mammals. Ann. Mag. N. H. London (9) **13** 1924 pp. 234–237.

609.—Thomas, O. Some notes on Pacas. Ann. Mag. N. H. London (9) **13** 1924 pp. 237–239.

610.—Thomas, O. On some Ceylon Mammals. Ann. Mag. N. H. London (9) **13** 1924 pp. 239–242.

611.—Thomas, O. Some new Australian Muridae. Ann. Mag. N. H. London (9) **13** 1924 pp. 296–299.

612.—Thomas, O. On a collection of Mammals made by Mr. Latham Rutter in the Peruvian Amazons. Ann. Mag. N. H. London (9) **13** 1924 pp. 530–538.

613.—Thomas, O. A new *Scoteinus* from Queensland. Ann. Mag. N. H. London (9) **13** 1924 p. 540.

614.—Thomas, O. A new Fish-eating Rat from Ecuador. Ann. Mag. N. H. London (9) **13** 1924 pp. 541–542.

615.—Thomas, O. A new Short-tailed Opossum from Argentina. Ann. Mag. N. H. London (9) **13** 1924 p. 586.

616.—Thomas, O. The geographical races of *Oryzomys ratticeps*. Ann. Mag. N. H. London (9) **14** 1924 pp. 143–144.

617.—Thomas, O. New *Callicebus*, *Conepatus* and *Œcomys* from Peru. Ann. Mag. N. H. London (9) **14** 1924 pp. 286–288.

618.—Thomas, O. A new subspecies of *Nyctinomus australis*. Ann. Mag. N. H. London (9) **14** 1924 pp. 455–456.

619.—Thomas, O. A new Pouched Mouse (*Phascogale*) from northern New South Wales. Ann. Mag. N. H. London (9) **14** 1924 pp. 528–529.

620.—Thomas, O. Scientific results of the Mammal Survey. No. XLIV. On a new Field-Mouse from Nepal, with a note on the classification of the genus *Apodemus*. J. Bombay N. H. Soc. **30** 1924 pp. 888–889.

621.—Thomas, O. Nomina Conservanda in Mammalia. Proc. Zool. Soc. London **1924** pp. 345–348.

622.—Thomas, O. A new genus and species of Shrew from Ceylon. Spolia Zeylan. Colombo **13** 1924 pp. 93–95.

623.—Thorpe, M. R. The generic distinctions between *Merycochoerus* Leidy and *Promerycochoerus* Douglass. Amer. J. Sci. New Haven (5) **7** 1924 pp. 121–131.

624.—Thorpe, M. R. White River (Oligocene) Eporeodons. Amer. J. Sci. New Haven (5) **7** 1924 pp. 219–226.

625.—Thorpe, M. R. Additional notes on *Oreodontoides oregonensis* Thorpe. Amer. J. Sci. New Haven (5) **7** 1924 pp. 316–318 3 figs.

626.—Thorpe, M. R. A new species of extinct Peccary from Oregon. Amer. J. Sci. New Haven (5) **7** 1924 pp. 393–397 2 figs.

627.—Thursby-Pelham, D. The placentation of *Hyrax capensis*. Phil. Trans. R. Soc. London **B 213** 1924 pp. 1–20 4 pls. 3 text-figs.

628.—Tjebbes, K. Crosses with Siamese Cats. J. Genetics Cambridge **14** 1924 pp. 355–366 1 pl.

629.—Toedtmann, W. Die Spermatozoen von *Vesperugo maurus*. Zool. Anz. Leipzig **58** 1924 pp. 59–69 12 figs.

630.—Togari, C. On the origin of the corpus luteum of the Mouse. Aichi J. Exper. Med. Nagoya 1 no. 2 1923 pp. 1–44 1 pl.

631.—Tracey, A. The origin of the Shepherd Dog. J. Heredity Washington **15** 1924 pp. 147–165 17 figs.

Tribe, M. *vide* Hill.

632.—Tsuda, S. Beitrag zur Entwicklungsgeschichte und zum Baue der Nasenhöhle der Marsupialier. Zs. ges. Anat. München 1 Abt. **70** 1924 pp. 489–511 30 figs.

633.—Turner, E. L. The pyramidal tract of the Virginian Opossum (*Didelphys virginiana*). J. Comp. Neur. Philadelphia **36** 1924 pp. 387–397 6 figs.

Turner, E. L. *vide* Gray.

634.—Turov, S. S. Une rencontre nouvelle du *Nyctalus siculus* Palumbo au Caucase du Nord. Bul. Inst. pedagog. Cauc. du N. Vladicaucase **5** pt. 2 1924. [Russian].

635.—Turov, S. Sur la faune des Vertebrés du littoral N.E. du lac Baikal. C.R. Acad. Sci. Leningrad **1924** pp. 109–112 [in Russian].

636.—Туров, С. [Turov, S]. К вопросу о Баргузинском соболином заповеднике [On the Barguzin sabre reservation]. Изв. Вост.-Сиб. Отд. Русск. Геограр. Общ., Иркутск [Mem. E.-Siberian Branch of the Russ. Geograph. Soc. Irkutsk] **41** 2 1923.

637.—Touroff, [Turov], S. S. Notice preliminaire sur les mammifères des gouvernement de Riasan et de Toula. Rev. Zool. Russe Moscow **1923** ? pp. 181–192. [Russian and French].

638.—Vallois, H. V. Etude anatomique d'une lignée de Souris anoures, brachyures et ectromèles. Arch. zool. Paris **62** 1924 pp. 569–628 12 figs.

639.—Vallois, H. V. Souris anoures, brachyures et ectromèles. C.R. Soc. Biol. Paris **90** 1924 pp. 473–475.

640.—Vallois, H. V. Constitution du carpe chez le Cobaye. C.R. Soc. Biol. Paris **90** 1924 pp. 1137–1139.

Van Volkenberg, H. L. *vide* Hanson.

641.—Versari, R. La morfogenesi dei vasi sanguiferi delle membrana pupillare e della zona dei processi ciliari nell'occhio di *Sus scropha*. Mem. Acc. Lincei Roma (5) **14** 1924 pp. 669–678 1 pl.

642.—Vicari, E. M. Experiments on Rats on the inheritance of training. Science New York **59** 1924 pp. 302–303.

643.—Vignati, M. A. À propos du *Diprothomo platensis*. Une observation à la critique du Professeur Schwalbe. An. Mus. Nac. Buenos Aires **31** 1923 pp. 25–30 2 figs.

644.—Vignati, M. A. Una mandibula de *Typotherium* con vestigios erróneamente atribuidos a la acción del hombre. Physis Buenos Aires **7** 1924 pp. 163–167 2 figs.

645.—Villaverde, J. M. de. Estudios anatomico-experimentales sobre el curso y terminacion de las fibres callosas. Trab. Lab. Invest. Biol. Univ. Madrid **19** 1922 pp. 37–68 8 figs.

646.—Villaverde, J. M. de. Sobre el origen de las fibres callosas en el Area Gigantopyramidalis del Conejo. Trab. Labor. Invest. Biol. Univ. Madrid **19** 1922 pp. 195–206 3 figs.

647.—Villaverde, J. M. de. Contribution à la connaissance du système commissural de l'aire motrice du lapin. Trab. Lab. Rech. Biol. Univ. Madrid **22** 1924 pp. 1–21 7 figs.

648.—Villaverde, J. M. de. Les connexions commissurales des régions postérieures du cerveau du Lapin. Trav. Lab. Rech. Biol. Univ. Madrid **22** 1924 pp. 99–141 17 figs.

649.—Vinogradov, B. S. Two new interesting Lemmings from Siberia. Ann. Mag. N. H. London (9) **14** 1924 pp. 186–189.

650.—Vinogradov, B. Table analytique pour la déterminature des rongeurs de la Sibérie occidentale. Bul. Siberian Entom. Bureau Leningrad **3** 1924 pp. 75–87 1 pl.

651.—Vinogradov, B. Observations sur les Rongeurs de la Sibérie occidentale. Bul. Siberian Entom. Bureau Leningrad **3** 1924 pp. 19–36 [Russian].

652.—Vinogradov, B. A second interesting species of Mongolian Gerboa of the genus *Salpingotus* Vinogr. (*Salpingotus crassicauda* sp. n.). Zool. Anz. Leipzig **61** 1924 pp. 150–152 5 figs.

Vintemberger, P. *vide* Ancel.

653.—Volta, A. de. Contributo alle morfologia dell'imene nelle proscimmie. Monitore Zool. Ital. Firenze **35** 1924 pp. 207–213 2 figs.

654.—Voronoff, M. S. Greffes des glandes endocrines du Singe à l'homme. Bul. Soc. Philom. Paris (10) **13** 1924 pp. 12–21 10 figs.

Voss, H. E. V. *vide* Lipschütz.

Wachter, W. L. *vide* Castle.

655.—Wang, G. H. A sexual activity rhythm in the female Rat. Amer. Nat. New York **58** 1924 pp. 36–42.

656.—Ward, A. E. The Mammals and Birds of Kashmir and adjacent Hill Provinces. J. Bombay N. H. Soc. **29** 1924 pp. 879–887 ; **30** 1924 pp. 118–131.

657.—Warren, E. H. A Musk-rat moves its young. J. Mamm. Baltimore **5** 1924 pp. 202–203.

658.—Warren, S. H. The Elephant-bed of Clacton-on-Sea. Essex Nat. Stratford **21** 1924 pp. 32–40 2 pls.

659.—Watson, K. M. The origin of the heart and blood vessels in *Felis domestica*. J. Anat. London **58** 1924 pp. 105–133 15 figs.

660.—Watt, H. B. and **St. Quintin,** W. H. American Grey Squirrel in Yorkshire. Naturalist London **1924** pp. 62–63.

661.—Watt, H. J. Dimensions of the Labyrinth correlated. Proc. R. Soc. London **B96** 1924 pp. 334–338.

662.—Weidenreich. Bedingen die Zähne die Bildung eines Processus alveolaris ? Verh. Anat. Ges. in Anat. Anz. **58** 1924 pp. 63–74 3 figs.

663.—Weidenreich, F. Ueber die pneumatischen Nebenräume des Kopfes. Ein Beitrag zur Kenntnis des Bauprinzips der Knochen des Schädels und des Körpers. Zs. ges. Anat. München Abt. **1** **72** 1924 pp. 55–93 16 figs.

664.—Weidman, F. D. Hyperplasia of reticulum tissue in lymph sinuses of Monkeys (*Cebus fatuellus*). Anat. Rec. Philadelphia **27** 1924 pp. 269–271.

665.—Weigold, H. Weitere Bemerkungen Dr. Weigolds zu den gesammelten Säugetieren in Zool. Ergeb. Walter Stötzners' Exped. Szetschwan etct. Teil. 3. Abh. Ber. Mus. Dresden **16** no. 2 1924 pp. 71–76.

Wiesner, B. T. *vide* Przibram.

Werndly, L. U. H. C. *vide* Quix.

666.—West, L. S. Observations on the lymphatic nodule, particularly with reference to histological changes encountered in senescence. Anat. Rec. Philadelphia **28** 1924 pp. 349–366.

667.—Wilhelm, J. Zur Entwicklungsgeschichte der Hinterhauptsschuppe des Rindes. Anat. Anz. Jena **59** 1924 pp. 1–11 7 figs.

668.—Williams, C. B. The food of the Mongoose in Trinidad. Bul. Dep. Agric. Trinidad Port of Spain **17** 1918 pp. 167–189.

669.—Winge, H. Pattedyr-Slaegter. **2** Rodentia Carnivora, Primates pp. 1–321; **3** Ungulata, Cetacea pp. 1–270 portr. Kjøbenhavn (Hagerups) 1924 8vo.

670.—Wislocki, G. B. On the fate of carbon particles injected into the circulation with special reference to the lungs. Amer. J. Anat. Philadelphia **32** 1924 pp. 423–445.

671.—Wislocki, G. B. and **Putnam,** T. J. Further observations on the anatomy and physiology of the areae postremae. Anat. Rec. Philadelphia **27** 1924 pp. 151–156.

672.—Wolffsohn, J. A. Catalogo de craneos de mamiferos de Chile colectados entre los años 1896 y 1918. Rev. Chilena Santiago **25** 1923 pp. 511–529; also **27** 1924 pp. 159–167.

673.—Wood, H. E. The position of the "Sparassodonts": with notes on the relationships and history of the Marsupialia. Bul. Amer. Mus. N. H. New York **51** art. 4 1924 pp. 77–101 57 figs.

674.—Wood, N. A. and **Dice,** L. R. Records of the distribution of Michigan Mammals. Papers Michigan Acad. Sci. New York **3** 1924 pp. 425–469.

675.—Woodward, Sir A. S. Some remarks on the Pleistocene Mammalia. Essex Nat. Stratford **21** 1924 pp. 1–12 2 pls.

676.—Woollard, H. H. Vital staining of the leptomeninges. J. Anat. London **58** 1924 pp. 89–100.

677.—Zong-Yung, T. Les cellules vibratiles a vacuoles ciliées dans l'épithélium vaginal chez la Lapine au cours du cycle oestrien de l'ovaire. C.R. Soc. Biol. Paris **90** 1924 pp. 775–777 1 fig.

678.—Zukowsky, L. Beitrag zur Kenntnis der Säugetiere der nördlichen Teile Deutsch-Südwestafrikas unter besonderer Berücksichtigung des Grosswildes. Arch. Natg. Berlin **90** Abt. A Hft. 1 1924 pp. 29–164 1 text-fig. 12 photos.

679.—Zukowsky, L. Vorlaufige Mitteilung über zwei neue Zebraform aus Südwestafrika. Arch. Natg. Berlin **90** Abt. A. Hft. 1 1924 pp. 165–168.

II.—SUBJECT INDEX.

N.B.—For full reference see Titles.

COMPREHENSIVE AND GENERAL.

General Works.—WINGE, **669.**

Museum Catalogue.—HOLLISTER, **259.**

Biography and Obituary.—J. J. Audubon, GRINNELL, **222**; H. Winge, BÖVING, **89**; HELMS, **247.**

Economics.—Behring Sea fur industry, BOWER, **90**; Reindeer-farming, SMITH, **571**; Beaver-farming, BAILEY, **42**; Oil Industry, Whales and Sirenians, GAVER, **208**; Sheeps' wool, DUERDEN & RITCHIE, **180**; Medical treatment of Foxes, HANSON & VAN VOLKENBERG, **232**; Rodents and arboriculture, SILVER, **568**; Economic status of *Microtus*, BAILEY, **41**; Of prairie-dog, TAYLOR & LOFTFIELD, **601**; Rats and Plague infection, PETRIE & OTHERS, **485**; Hygienic control in Zoological Gardens, FOX, **201**; Origin of Irish dogs, SCHARFF, **532**; Of Sheep-dogs, TRACEY, **631**; of White Rabbits, CASTLE, **124.**

Technique, Apparatus.—Preservation of material, A. H. SCHULTZ, **547**; Microscopic staining, BALBUENA, **43**; PAINTER, **459**; WOOLLARD, **676**; Study of living tissue, SANDISON, **530.**

Historical.—Aurochs in Russia, KULAGIN, **331.**

Naturalization.—European animals in New Zealand, DOWNE, **170**; European Hare in North America, SILVER, **567.**

Destruction and Conservation.—Game in South Africa, CURSON & HUGO, **154**; White Rhinoceros, LANG, **338**; European Bison, DE BEAUX, **56**; STECHOW, **582**; SZTOLCMAN, **599**; American Bison in Canada, KITTO, **307.**

Nomenclature.—Lists of generic names, ANON., **23**; STILES, **590**; Nomina conservanda, THOMAS, **621**; Minor notes, CABRERA, **107**; KRAUSSE, **318.**

STRUCTURE.

General anatomy of special forms.—Textbook of Veterinary Anatomy, M'FADYEAN, **385**; Anthropoids, SONN-

TAG, **574, 575**; Foetus of *Alouatta*, A. H. SCHULTZ, **548**; Rat, DONALDSON, **169**; Monster mouse, VALLOIS, **638**; *Globicephala*, RITCHIE, **517**; *Macropus*, JONES, **285**.

External and Tegumentary.—Epidermis, KRIEG, **322**; SHAPIRO, **560**; Lips of newborn Cat, ANSON, **24**; Lips of Squirrel, SCHUMACHER, **552**; Lips and cheeks, SCHUMACHER, **553**; Human chin, BOLK, **76**; Limbs of Seals, BROMAN, **95**; Skin glands, BRINKMANN, **94**; Axillary glands, KLAAR, **308**; Circumanal glands, SCHAFFER, **531**; Hybernating gland, SHELDON, **565**; Hair, HAUSMAN, **241**; TELLO, **603**; Hair tracts, JONES, **284**; Bat's Hair, COLE, **143**; Sheeps' wool, DUERDEN & RITCHIE, **179**; Gorilla's foot, LANKESTER, **342**; African Carnivora, J. A. ALLEN, **11**; Newly-born Carnivora, DE BEAUX, **57**; *Potamochoerus*, DE BEAUX, **58**; Edentata, POCOCK, **492, 493, 494**; Marsupials, KRIEG, **323, 324**; TSUDA, **632**.

Histology and Cytology.—Connective tissue, HERINGA, **248, 249**; Fat cells, GUYON, **227**; POLICARD, **496**; "Zwischen zellen," KITAHARA, **306**; Golgi apparatus, GIL Y GIL, **214**; Cilia, RÉNYI, **509**.

Dentition and Tooth-structure.—Dentine and Enamel, JASSWOIN, **276, 277**; Teeth with open pulp-cavity, HOYER & BABIK, **266**; Cytology of dental fascia, BERLUCCHI, **62**; Molar teeth, WEIDENREICH, **662**; *Amphicyon*, HELBING, **246**; Entelodonts, MARINELLI, **396**; Fossil Elephants, STEFANESCU, **585**; *Bradypus*, SCHMIDT, **544**; *Desmostylus*, HAY, **243**.

Nervous System.—Brain, CAJAL, **109, 111, 112**; CASTRO, **127, 128**; KUHLENBECK, **330**; LORENTO DE NÓ, **376, 377**; LUNA, **381**; RIESE, **514**; VILLAVERDE, **646, 647, 648**; Cerebellum, W. F. ALLEN, **12**; ESTABLE, **190**; Pyramidal Tract, TURNER, **633**; Dura mater, POPA, **500**; Brain of Carnivora, ANTHONY & COUPIN, **34, 35**; Rodents, FORTUYN, **199**; LORENTO DE NÓ, **375**; CASTALDI, **121**; *Tupaia*, CLARK, **142**; *Didelphys*, GRAY, **219**; GRAY & TURNER, **220**; HERRICK, **251**; Spinal Cord, VILLAVERDE, **645**; POLJAK, **497**; Trigeminal nerve, THELANDER, **605**; Vagus, MCCREA, **384**; Hypoglossal, SPRENKEL, **578**; Semilunar ganglion, W. F. ALLEN, **13**; Myenteric plexus, CARPENTER, **119**; Cervical ganglion, LAWRENTJEW, **349**; Nerve supply of semicircular canals, BURLET, **100**; of tongue, LANGWORTHY, **340**; of submaxillary gland, CATANIA, **130**; of larynx, ARIONE, **36**; of lung-vessels, LE BLANC & LIND VAN WYNGAARDEN, **351**; of heart, PERMAN, **474**; of pancreas, CASTRO, **129**; of kidney, HIRST, **256**; of muscles, DART, **158**; Nerve-endings in hairs, TELLO, **604**; In epithelium, KADANOFF, **286**; in intestine, CARPENTER, **120**; in mesentery, KADENOFF, **287**.

Sense Organs.—Nictitating membrane of eye, KINGSLEY, **305**; Retina of nocturnal Mammals, DETWEILER, **166**; Eye of Bats, KOLMER, **312**; Labyrinth of ear, WATT, **661**; Semicircular canals, GIRARD, **215**; LEBEDKIN, **350**; Maculae acousticae, BURLET & HAAS, **101**; Ear of Edentata, KAWANO, **291**.

Myology.—General, DIAMARE, **167**; Growth of striped muscle, LEVI, **355**; Facial Muscles, HUBER, **267, 268**; Neck muscles, PAUGGER, **470**; Foot muscles, KAJAVA, **288**; Foot-tendons of Artiodactyles, HEIDSIECK, **245**; Retractor bulbi and Sternocostalis, CORDS, **146, 147**; Supra-hyoid, BERTELLI, **64**; Periclavicular, BANT, **45**; Paniculus carnosus, LANGWORTHY, **341**; Gorilla, MORTON, **428**; Anal sphincter of Chimpanzee, FORSTER, **194**; Hind-limb of *Mormon*, SCHUMACHER & LEBZELTER, **551**; *Tupaia*, CLARK, **141**; Buffalo and Zebu, MOULIN, **426**; Shoulder of Horse, SCHAUDER, **536, 537**; *Oryctéropus*, EDGEWORTH, **183**.

Osteology, Recent Forms, General.—Hairs in bone, DOYON, **171**; *Mesoplodon*, HARMER, **234**; Cetacea, G. S. MILLER, **412, 414**.

Osteology, Skull.—Turbinal bones, ANTHONY & COUPIN, **33**; Bathrocephaly, BACKMAN, **39**; Craniometrical methods, BARRAS DE A., **47**; Nasal bone and shape of face, FORSTER, **195**; Alisphenoid bone, GREGORY & NOBLE, **221**; Direction of optic canal, HARTMANN, **238**; Nasal sinus, LAFITE-DUPONT & SÉROULITCH, **337**; Pneumatic spaces, WEIDENREICH, **663**; Primates, REMANE, **508**; FORSTER, **198**; Anthropoids, SERGI, **558**; *Pithe-*

canthropus, DUBOIS, **176**, **177**; MAIR, **389**; Carnivora, J. A. ALLEN, **11**; *Gulo*, SHUFELDT, **566**; *Potamochoerus*, DE BEAUX, **58**; *Ovis*, PETCOFF, **481**; Ear bones of Marsupials, KLAAUW, **309**.

Osteology, Vetebrae and Limb Arches.—Vertebral column, DELATRE, **163**; OKAMOTO, **445**; Proatlas, HAYEK, **244**; Asymmetry of axis, DELATRE, **162**; Lesser trochanter, ROMER, **524**; Morphology of foot, FORSTER, **196**; Femur of *Pithecanthropus*, SCHWALBE, **554**; Carpals of Otter, LUTHE, **382**; Limb bones of *Mus*, PETCOFF, **482**; Carpus of *Cavia*, VALLOIS, **640**; of Proboscidea, GAWRILENKO, **209**; Tarsus of *Alces*, KOS, **315**; Ribs of Horse, EBERT, **182**.

Osteology and dentition, Extinct Forms.—*Pithecanthropus*, DUBOIS, **176**, **178**; Carnivora, MATTHEW, **400**; SINCLAIR, **569**; TEILHARD, **602**; Rodentia, MONTAGU, **420**; STEHLIN, **588**; Ungulata, ABEL, **2**; BORISIAK, **80-88**; BREUNING, **93**; LOOMIS, **372**, **373**; REICHENAU, **506**; RINGSTRÖM, **515**; THORPE, **624-626**; Cetacea, GAREOD, **205**; KELLOGG, **293**, **294**; Edentata, Kragliewich, **316**.

Alimentary System.—"Ackerkneht" organ in roof of mouth, ACKERMANN, **3**; Jacobsons Organ, KERKHOFF, **297**; organ of Chevitz BOLLEA, **78**; Maxillary sinus, BAST, **50**; Tongue, SONNTAG, **576**; Flint pebbles in stomach, ANTHONY & COUPIN, **32**; Intestine of *Okapia*, DERSCHEID & NEUVILLE, **164**; Vermiform Appendix, MORGERA, **427**; Mesenteries, FLEISCHMANN, **192**; Pancreas, HETT, **252**; CLARA, **138**; Liver, NEUVILLE, **433**; PFUHL, **486**.

Circulatory System.—Heart, PACE, **458**; BRUNI, **99**; WISLOCKI & PUTNAM, **671**; Heart ossicle, KATSCHINSKY, **290**; Size and capacity of blood vessels, LUNA, **380**; Venous system, *Physeter*, BEDDARD, **60**; Neuro-cranial vascular system, GELDEREN; Vascular system of eye, VERSARI, **641**; Of the ear, NABEYA, **431**; of the enamel organ, KINGERY, **304**; of the intestine, EISBERG, **186**; of the interstitial tissue, BARTFELD, **49**; Choroid plexus, KALWARYJSKI, **289**; NOEL & ACCOYER, **438**; Carotid body, SMITH, **570**; Blood and its corpuscles, MARCHESINI, **392**; PETKOV, **483**; PONDER, **498**; Haemaglobin crystals, KRUMMACHER, **328**; MOLLENHOFF, **417**; Lymphatic nodules, WEST, **666**.

Ductless and other Glands.—Thymus, JOLLY & TANNENBERG, **282**; Thyroid, MEISSEN, **404**; Renal lymph-gland, HARMS, **235**.

Respiratory System.—Trachea, FORSTER, **197**; Larynx of *Hylobates*, MOTT, **429**; Respiratory organs of Marsupials, HARTMANN-WEINBERG, **239**.

Excretory Organs.—Nephrocytes of Kidney, RIO-HORTEGA, **516**; Sirenian Kidney, PETIT, **479**, **480**; in Bovidae, PETIT, **476**.

Organs of Reproduction.—Female organs of *Lemur*, VOLTA, **653**; of *Dasypus*, ALTMANN, **14**; Ovum, *Ornithorhynchus*, GATENBY & HILL, **207**; Graafian follicles, KENNEDY, **296**; SCLAVOUNOS, **556**; Unfertilized ovum, MANN, **390**; Oocyte of Dog, GARGANO, **204**; Ovum during Oestrous cycle, COURBIER, **149**; Luteal cells, GATENBY, **206**; SALAZAR, **527**, **528**, TOGARI, **630**; Vagina of Rabbit, ZONG-YUNG, **677**; Placenta, LANGE, **339**; of *Hyrax*, THURSBY-PELHAM, **627**; Male organs of Cetacea, R. ANTHONY, **31**; Pancreatic tissue in testis, KUNTSCHIK & SALZER-**332**; Spermatozoa of *Vesperugo*, TOEDTMANN, **629**; Epididymis, LANZ, **343**, **344**; LEHNER, **352**; POHL, **495**; REDENZ, **505**; Interstitial cells of vas deferens, CUTORI, **155**; Hermaphrodite organs of Guinea Pig, BROWN, 98.

Miscellaneous.—Morphology of old age, HARMS, **236**.

PHYSIOLOGY.

General Physiology. — Of Rabbit, DONALDSON, **169**; of Sirenia, SONNTAG, **575**.

Nervous System and Sense Organs.—Brain of *Macacus*, DUSSER DE B., **181**; *Didelphys*, ROGERS, **521**; Weight of Brain, LATIMER, **346**; Retina of nocturnal mammals, DETWILER, **166**; Vestibular apparatus of ear, MAGNUS & DE KLEYN, **387**; Trigeminal nerve, IRI, **274**; Nerve endings of intestine, CARPENTER, **120**; Innervation of pyloric sphincter, NAKANISHI, **432**; Nerves of genital organs, OHMORI, **444**; Nerve

growth and regeneration, CAJAL, **110**; Nervous regulation of progression, LAUGHTON, **347**.

Muscle.—Muscular tone and the skin, OZORIO & PIÉRON, **457**.

Flight mechanics.—Of Bats, PETERSEN, **475**.

Weight and Growth.—Newly-born and adults, R. ANTHONY, **30**; Birth-weight of Rabbits, KOPEĆ, **313**; Weight and measurement of organs of Dog, LEINATI, **353**.

Temperature. — Temperature and metabolism Edentata, OZORIO & FIALHO **454, 455, 456**; temperature and respiration in *Didelphys*, GLEY & OZORIO, **216**; of Fur-Seals, HANNA, **230**.

Hybernation.—Respiration in hybernating animals, ENDRES, **189**.

Nutrition and Digestion.—General, PARAT, **463**; MASUROVSKY, **398**; in Ruminants, CAPOBIANCO, **116, 117**; Fat absorption, INOUYE, **273**; Liver in *Talpa*, PFUHL, **486**; Gall-stones, BLAND-SUTTON, **73**; Experimental work, BERTRAND & NAKAMURA, **65**; MA, **383**.

Bone and Joints.—Cranial growth, DUBOIS, **177**; Ossification and Rontgen Rays, KÜPFER & SCHINZ, **333**; Phagocyte activity and bone growth, BAST, **51**; Effect of muscle on bone form, BERNHARD, **63**; Otolithic pressure on bone form, QUIX & WERNDLY, **504**.

Ductless and other Glands.—Jacobson's organ, KERKHOFF, **297**; Thyroid and Braxy disease, BAMBER, **44**; Suprarenals and bone formation, KRUSE, **329**; Maxillary sinus, BAST, **50**; Harderian Gland, MULON & DUBOC, **430**; Secretion and the Golgi apparatus, NASSANOW, **434**.

Reproduction. — Gestation, *Geomys*, HISAW, **257**; Ovulation in *Erinaceus*, COURRIER, **151**; Vagina in *Didelphys*, HARTMAN, **237**; Ovary degeneration, BRANCA, **91**; Migration of ova, PARKES, **467**; Oestrous cycle, ANCEL & VINTEMBERGER, **18**; COURBIER, **149**; MCNUTT, **386**; WANG, **655**; COURRIER, **150**; Periodic modifications of the uterus, BAGLIONI, **40**; Respective influence of ovary and uterus, TAKAKUSU, **600**; Artificial fecundation, IVANOW, **275**; Statistics of fertility in mice, PARKES, **466**; Epididymis, LEHNER, **352**.

Castration Experiments.—BENOÎT, **61**; PENROSE, **473**; STIEVE, **589**.

Experimental Physiology.—Sex questions, LIPSCHÜTZ & VOSS, **358, 359, 360**; Unilateral ovariotomy, ASDELL, **37**; Experimental Hermaphroditism, LIPSCHÜTZ, KRAUSE & VOSS, **357**; Thyroid experiments, HAMMETT, **228, 229**; Rejuvenescence, OSLUND, **453**; Grafting experiments, CRISTIANI, **153**; MOORE, **423**; SCHINZ & SLOTOPOLSKY, **539**; RETTERER, **510**; VORONOFF, **654**; Vasectomy, MOORE & QUICK, **424**; Injection experiments, PAPILIAN & STANESCU-JIPPA, **462**; FINLAY, **191**; HUXLEY & CARR-SAUNDERS, **270**; WISLOCKI, **670**; Facial myology, HUBER, **268**; Temperature and tail length, PRZIBRAM & WIESNER, **503**.

Bio-chemistry.—Cholesterol in Hippopotamus, GARDNER, **203**.

Miscellaneous.—Old age, HARMS, **236**; Mechanism of tooth-change in Elephants STEFANESCU, **583**; Bloodtests for races of Sheep, BIALOSUKNIA & KACZKOWSKI, **66**.

DEVELOPMENT.

Oogenesis and Spermatogenesis, KREMER, **320**; PAINTER, **460**.

Early Stages.—Cat, HILL & TRIBE, **253**; Ox, KRÖLLING, **325**; Mouse, SOBOTTA, **573**.

Nervous system.—Brain, KUHLENBECK, **330**; Cranial ganglia, COSTA, **148**; Optic nerve, MONAKOW, **418**; Genetal nerves, OHMORI, **444**.

Skeleton and Limbs.—Limbs of Seals, BROMAN, **95**; Skull, *Bos*, WILHELM, **667**; *Sus*, ANDREAS, **21**; Proatlas, HAYEK, **244**; Clavicle and Sternum, HOMMES, **260**; Ulna, Horse, DRAHN, **173**; Hyperdactylous Pig, DRAHN, **174**.

Reproduction.—Genetals of "Free-Martin," BISSONETTE, **72**; Ovum, KREMER, **321**; Ovary of Cow, BECK, **59**; Twins from single ovum, STREETER, **592**; Corpus luteum, TOGARI, **630**.

Circulatory System.—Heart, WATSON, 659; BRUNI, 99; Neuro-cranial veins, GELDEREN, 210; Carotid body, SMITH, 570; Blood cells, MARCHESINI, 392; EMMEL, 188; Lymphatic system, MARCHAND, 391; Thoracic duct, GRODZINSKI, 225.

Other Organs.—Hairs, TELLO, 603; Nasal cavity of Marsupials, TSUDA, 632; organ of Chevitz, BOLLEA, 78; Langerhaus Islands of pancreas, CLARA, 138; Nephocytes of Kidney, RIO-HORTEGA, 516; Miogenesis, CAREY 118; Limb - muscles of Horse, SCHAUDER, 535.

Embryology of special forms.—*Colobus*, A. H. SCHULTZ 546; *Scotophilus* KOIKE 311.

Experimental Embryology.—Influence of metallic ions, MENDELÉEFF, 405.

ETHOLOGY.

Habits in general and field-notes.—CHASEN, 134; WARD, 656; A. W. ANTHONY, 25; CLARK, 140; CRAM, 152; CUYLER, 156; DIXON, 168; FOSTER, 200; HUEY, 269; KLUGH, 310; MONTAGU, 421; PITMAN, 490; SCHEFFER, 538; SHAW, 561–3; SHEAK, 564; SNYDER, 572; WARREN, 657.

Psychology.—SHEAK, 564.

Feeding Habits.—Dolphins, HARMER, 233; Squirrels in Denmark, JENSEN, 278; *Myotis*, PITTMAN, 490; Mungoose in Trinidad, WILLIAMS, 668.

Ecology and effect of external conditions.—In U.S.A., HATT, 240; Climatic effects of high elevation, KESTNER, 301; Causes of periodical fluctuations in numbers, ELTON, 187.

Habitats.—Cave fauna in Assam, KEMP, 295.

Pathology.—Tuberculosis, LISTON & SOPARKAR, 361; Grave's disease, LUCAS, 379; Braxy, BAMBER, 44; *Simia*, SONNTAG, 575; *Cebus*, WEIDMAN, 664; Palaeopathology, ROMER, 523; BABIK, 38.

VARIATION AND ÆTIOLOGY.

Teratology and abnormalities.—Monster Dog, CHIDESTER, 137; "Rattenkönige," MOHR, 416; *Cavia*, LIPSCHÜTZ, 356; Pig, MONTEROSSO, 422; Horse, MINETT, 415; Various organs, METTAM, 406, 407; Dentition, G. S. MILLER, 413; Hair arrangement, NIEDOBA, 436; Hypo- and Hyperdactyly, LATASTE, 345; BROMAN, 95; Arteries, DRAHN, 172; SCHAUDER, 534; Bile duct LOMBARD & TAGAUD, 364; Diaphragm, BARRY & DONEGAN, 48; Experimental Teratology, GUYER & SMITH, 226; SZILY, 598; VALLOIS, 639.

Sexual Questions.—The sex ratio, KING, 303; PARKES 465, 468.

Hermaphrodite Studies.—BROWN, 98.

Variation. — Individual, *Microtus*, HOWELL, 261; Melanism in *Cricetus*, STACH, 579.

Heredity.—Inheritance of acquired characters, LITTLE & BAGG, 362; Inheritance of training, VICARI, 642.

Colour Adaptation. — SUMNER & SWARTH, 595.

Genetics.—CAMPBELL, 115; CASTLE, 123, 125; CASTLE & WACHTER, 126; DETLEFSEN & CLEMENTE, 165; DRY, 175; KEELER, 292; KOPEĆ, 314; KRONACHER, 326; KRÖNING, 327; LITTLE & STRONG, 363; PEARSON, 471; PICTET & FERRERO, 489; PUNNETT, 502; ROBERTS, 520; W. SCHULTZ, 549; TJEBBES, 628.

Phylogeny.—Anthropoids, SONNTAG, 574; Canidae and Dicotylidae, MATTHEW, 400; Proboscidea and Sirenia, ANDREWS, 22; Proboscidea, GAWRILENKO, 209; STEFANESCU, 584; *Rhinoceros*, BREUNING, 93; HILZHEIMER, 254; Horse, MATTHEW, 399; Oreodonts, LOOMIS, 273; Edentata, KRAGLIEVICH, 316; POCOCK, 494; Marsupials and Sparassodonts, WOOD, 673; Domestic breeds, CASTLE, 124; SCHARFF, 533; TRACEY, 631; Foot-joint, FORSTER, 196; Placenta, LANGE, 339.

Taxonomy and Classification.—Extinct Peccaries, THORPE, 626; Stability of subspecific characters, SUMNER, 594.

GEOGRAPHY.

General Problems.—Osborn, **452**; Schwarz, **555**.

Palaeartic Region.

British Isles.—General, Bolam, **75**; Herts, Oldham, **446**; Wiltshire, Peirson, **472**; Yorkshire, Watt & St. Quintin, **660**; Scilly, Hinton, **255**; Scotland, Ritchie, **517, 518**; Ireland, Ruttledge, **525**.

Scandanavia.—Norway, Johnsen, **279**; Ingebrigtsen, **272**; Sweden, Forsslund **193**; Denmark, Degerbol, **160**.

Russia.—Bianchi, **67, 68**; Birula, **71**; Ognev, **440**; Turov, **634, 637**.

France.—Chaine, **132**; Pic, **488**; and Belgium, Schreitmüller, **550**.

Central Europe.—Germany, Krausse, **319**; Hungary, Éhik, **184, 185**; Paszlavszky, **469**.

Spain.—Cabrera, **108**.

Italy.—Altobello. **15**.

Balkan Peninsula.—St. Konsulow, **526**; Bosnia Hercegovina, Bolkay, **77**; Greece, Cabrera, **106**.

North Africa.—Joleaud, **280**; Morocco, Cabrera, **105**; Tunisia, Lavauden, **348**; Cirenaica, Ghigi, **213**.

Western Asia.—Persia, Lönnberg, **369**; Iraq, Birula, **70**.

Russian Asia. — Kirghiz Steppe, Martino, **397**; Siberia, Ognev, **441, 442, 443**; Thomas, **606**; Turov, **635, 636**; Vinogradov, **649, 650, 651**; Turkestan, Černavin, **131**.

Eastern Asia.—Mongolia, G. M. Allen, **7**; Birula, **70**; Vinogradov, **652**; Tibet and W. China, Weigold, **665**; Japan, Kuroda, **335**; Kurile Is., Kuroda, **336**.

Ethiopian Region.

West Africa.—Belgian Congo, J. A. Allen, **11**; Cabrera, **105**.

South Africa, Roberts, **519**; S.W. Afr. Protectorate, Zukowsky, **678**.

Central and East Africa.—Hollister, **259**; Kershaw **299**; Uganda, de Beaux, **52**; Lönnberg & Gyldenstolpe, **371**; Pemba I., Kershaw, **300**.

North-Eastern Africa. — Egyptian Sudan and Abyssinia, Kershaw, **298**; Italian Somaliland, de Beaux, **53, 54, 55**; Arabia, Cheesman & Hinton, **136**.

Madagascar.—Joleaud, **281**; Petit, **478**.

Indian Region.

India (including Ceylon).—Kashmir, Ward, **656**; Assam, Kemp, **295**; Nepal, Thomas, **620**; Ceylon, Phillips, **487**; Thomas, **610, 622**.

South China.—Yunnan, G. M. Allen, **7**; Sowerby, **577**; Riukiu Is., Kuroda, **334**.

Malayia.—Malay Peninsula, Chasen, **133, 134**; Chasen & Kloss, **135**; Stead, **581**; Sworder, **597**; Borneo, Cabrera, **103**; Lönnberg, **370**; Java, Dammerman, **157**.

Australian Region.

Australia.—Longman, **365**; South Australia, Jones, **283, 285**; Thomas, **618**; New South Wales, Thomas, **619**; Queensland, Le Souef, **354**; Thomas, **611, 613**; Tasmania, Lord & Scott, **374**.

New Zealand.—Donne, **170**; Oliver, **447**.

Hawaiian Is.—G. S. Miller, **410**.

Neotropical Region.

South America.—Thomas, **608, 618**; Argentina, Castellanos, **122**; Krieg, **323**; Marelli, **395**; Thomas, **615**; Chile, Krieg, **324**; Wolffsohn, **672**; Peru, Thomas, **612, 617**; Brazil, Hermann, **250**; Ribeiro, **513**; Bt. Guiana, H. E. Anthony, **29**; Ecuador, H. E. Anthony, **27**; Thomas, **614**; Colombia, Niceforo, **435**; Thomas, **607**.

Central America and West Indies.—G. S. Miller, **411**; Costa Rica, Cabrera, **102**.

NEARCTIC REGION.

General.—G. S. MILLER, **411**.

Mexico.—Guadeloupe I., A. W. ANTHONY, **25**; HUEY, **269**; Lower California, MAILLIARD, **388**.

Western U.S.A. — California, GRINNELL & DIXON, **223**; GRINNELL & STORER, **224**; HOWELL, **262**; HOWELL & LITTLE, **264**; Arizona, GOLDMAN, **217**; Colorado, F. W. MILLER, **408, 409**.

Middle U.S.A.—Michigan, HATT, **240**; WOOD & DICE, **674**.

Canada.—ANDERSON, **20**; KITTO, **307**; Quebec, ANTHONY & GOODWIN, **28**; GOODWIN, **218**; Bt. Columbia, SWARTH, **596**; Baffin Land, ALLEN & COPELAND, **10**.

OCEANS.

Atlantic.—Morocco coast, MONOD, **419**.

GEOGRAPHY, FOSSIL FORMS.

Eocene.—France, TEILHARD, **602**; Mongolia, MATTHEW & GRANGER, **401, 402**; Mongolia, OSBORN, **448, 449**; Cretaceous Eocene, Patagonia, IHERING, **271**.

Oligocene.—Germany, ROMAN, **522**; Mongolia, MATTHEW & GRANGER, **401, 402**; U.S.A., PETERSON, **484**; THORPE, **625**; SINCLAIR, **569**; Vancouver I., CLARK & ARNOLD, **139**.

Miocene.—Italy, CAMPANA, **114**; Russia, SERGUÉEV, **559**; BORISSIAK, **87**; Baluchistan, COOPER, **144**; Mongolia, BORISIAK, **79, 81, 82, 83, 84**; OSBORN, **451**; SCHLOSSER, **542, 543**; N. China, RINGSTROM, **515**; India, BROWN & OTHERS, **96**; India, PALMER, **461**; California, DAVIDSON, **159**; HANNA & MCLELLAN, **231**; Nebraska, LOOMIS, **373**; MATTHEW, **400**; Texas, HAY, **242**; Maryland, KELLOGG, **293, 294**.

Pliocene.—British Isles, COOPER, **145**; PONTIER, **499**; France, SCHAUB, **533**; STEHLIN, **587**; Germany, REICHENAU, **506**; Italy, CAMPANA, **113**; U.S.A., THORPE, **626**; MATTHEW, **400**; Argentina (Pampean), AMEGHINO & KRAGLIEVICH, **17**; REVILLIOD, **511**.

Post-tertiary to Recent.—England, GARROD, **205**; PONTIER, **499**; SANDFORD, **529**; WOODWARD, **675**; WARREN, **658**; Holland, GERTH, **212**; Denmark, NORDMANN, **439**; Russia, RIABININ, **512**; France, BARDIÉ, **46**; Germany, SCHMIDTGEN, **545**; Poland, ADAMETZ & NIEZABITOWSKI, **4**; NIEZABITOWSKI, **437**; HOYER, **265**; MARCHLEWSKI, **394**; Roumania, STEFANESCU, **586**; Italy, AIRAGHI, **6**; Amoorland, BRAUNER, **92**; Belgian Congo (age ?), v. STRAELEN, **591**; King I., Tasmania, SCOTT & LORD, **557**; U.S.A., STAUFFER, **580**.

Tertiary general and undefined.—Hungary, SCHLESINGER, **540**; Australia, LONGMAN, **366**; S.W. African Protect., STROMER, **593**; Peru, H. E. ANTHONY, **26**.

III.—SYSTEMATIC.

The Families are arranged according to Trouessart's Catalogue and the genera in alphabetical order. The numerals in Clarendon type, when not indicating a volume, refer to titles.

A list of recent North American Mammals, G. S. MILLER **411**.

ORDER PRIMATES.

General review of families and genera p. 250, WINGE **669**.

Catalogue of East African Primates in the U. S. National Museum, HOLLISTER **259**.

The anatomy and evolution of the Apes and Man, SONNTAG **574**.

Direction of the optic canal, HARTMANN **238**.

The cribriform plate of the ethmoid, FORSTER **198**.

Asymmetry of the axis bone, DELATRE **162**.

Neck-muscles of the Primates, PAUGGER **470**.

Anatomy of the axillary glands, KLAAR **308**.

Spermatogenesis and sex chromosomes in Monkeys p. 433, PAINTER **460**.

SIMIIDAE (AND HOMINIDAE).

Craniometry in Anthropoids, BARRAS DE A **47**.

Supraorbital region in Anthropoids and Man, SERGI **558**.

Anthropithecus troglodytes psychology and habits in captivity, SHEAK **564** ; anatomy of the anal sphincter, FORSTER **194**.

†*Diprothomo platensis* discussion of relationship and status, AMEGHINO **16**, VIGNATI **643**.

†*Dryopithecus pilgrimi* p. 1 figs. 1–3, *D. cautleyi* p. 5 fig. 4, *D. frickae* p. 5 fig. 5 Siwalik beds (M. Miocene) India BROWN, GREGORY & HELLMAN Amer. Mus. Nov. **130**.—*D. mogharensis* Fourtau, affinities discussed, not a member of genus *D.*, REMANE **507**.

Gorilla gorilla shape and anatomy of foot, LANKESTER **342** ; on the peroneus tertius muscle, MORTON **428** ; skeleton showing recovery from gunshot wounds, HOLLAND **258**.

Hylobates osteology and shape of the face, FORSTER **195**.—*H. syndactylus* structure of larynx, MOTT **429**.

†*Pithecanthropus erectus* characters of cranium, brain, mandible and teeth, DUBOIS **176**, eleven plates illustrating the skull, DUBOIS **178** ; on the femur, SCHWALBE **554** ; on the skull, MAIR **389**.

†*Pliopithecus posthumus* **sp. n.** Tertiary Mongolia, SCHLOSSER Palaeont. Sinica ser. C **1** fasc. 2 p. 11 figs.

†*Prohylobates tandyi* Fourtau probably = *Propliopithecus haeckeli* Schlosser, REMANE **507**.

Simia satyrus anatomy, physiology and pathology with 4 pls. and 30 text-figs., SONNTAG **575**.

CERCOPITHECIDAE.

Cercopithecus griseoviridis nomenclatural discussion p. 20, KERSHAW **298**.—*C.* (*Insignicebus*) *albogularis zammaranoi* **subsp. n.** Ital. Somali, DE BEAUX Atti soc. ital. Milano **62** p. 248.

Colobus measurements and anatomy of the foetus, A. H. SCHULTZ **546**.

Macacus position of the maculae acousticae in the skull, BURLET & HAAS **101**.—*M. irus* note on races p. 59, CHASEN **133**.

†*Macacus anderssoni* **sp. n.** Tertiary Honan China, SCHLOSSER Palaeont. Sinica ser. C. **1** fasc. 2 p. 3 3 figs.

Mormon sphinx myology of hind limb, SCHUMACHER & LEBZELTER **551**.

Presbytiscus **gen. n.** for *Rhinopithecus avunculus* Dollm. POCOCK P. Z. S. 1924 p. 330 (also abstr. P. Z. S. Febr. p. 17.)

†*Procynocephalus wimani* **gen. et sp. n.** Tertiary Honan China, SCHLOSSER Palaeont. Sinica ser. C. **1** fasc. 2 p. 8 4 figs.

Theropithecus obscurus at Lake Tsana p. 27, KERSHAW **298**.

CEBIDAE.

Alouatta seniculus macconnelli study of foetus 6 figs., A. H. SCHULTZ **548**.

Ateles ater structure of tracheal sac, FORSTER **197**.

Callicebus oenanthe **sp. n.** Peru, THOMAS Ann. Mag. N. H. (9) **14** p. 286.

Cebus fatuellus colour-change in captivity, CABRERA **104** ; hyperplasia of lymph sinus, WEIDMAN **664**.

CALLITRICHIDAE.

Hapale cœlestis Serra dos Orgaos p. 212, *H. petronius* Minas p. 213 both Brazil **spp. n.**, RIBEIRO Bol. Mus. Nac. Rio de J. 1 [Latin diagn.].

ORDER PROSIMIÆ.

CHIROMYIDAE.

†*Heterohyus nanus* **sp. n.** Eocene France (Quercy), TEILHARD Ann. Pal. Paris **11** p. 93 figs.

LEMURIDAE.

Lemur macaco the virgin female genetal organs, VOLTA **653**.

NYCTICEBIDAE.

Nycticebus coucang habits etct. in captivity with fig., PRATER **501**.

TARSIIDAE.

Tarsius spectrum habits and other notes, CLARK **140**.

ORDER CHIROPTERA.

Russian Bats, BIANCHI **67** **68**.

Notes and measurements of British Bats, BOLAM **75**.

A review of the Ceylon Bats, PHILLIPS **487**.

Bat's hair as an aid to taxonomy, COLE **143**.

Structure of the eyes, KOLMER **312**.

Anatomy of the spinal cord, POLJAK **497**.

Flight-mechanics in Bats, PETERSEN **475**.

PTEROPODIDAE.

Cynopterus sphinx gangeticus in Siju Cave Assam p. 24, KEMP **295**.

RHINOLOPHIDAE.
(HIPPOSIDERIDAE.)

Hipposideros lankadiva in Siju Cave Assam p. 24, KEMP **295**.

Rhinolophus cornutus orii p. 4, *R. c. miyakonis* p. 5 **subspp. n.** Riu Kiu Is., KURODA **334**.—*R. darlingi barbertonensis* **subsp. n.** Barberton, Tr., ROBERTS Ann. Transvaal Mus. **10** p. 59.—*R. hildebrandti perauritus* remarks p. 153, DE BEAUX **55**.

NYCTERIDAE.

Lavia frons rex in Ital. Somali p. 255, DE BEAUX **53**.

Petalia parisii **sp. n.** Ital. Somali, DE BEAUX Atti soc. ital. Milano **62** p. 254.

VESPERTILIONIDAE.

Barbastella barbastellus in Hertfordshire, OLDHAM **446**.

Dichromyotis **subg. n.** for *Vespertilio myotis* Bechst., BIANCHI Ann. Mus. Zool. Petrograd **21** p. lxxviii.

Eptesicus fuscus field notes, KLUGH **310**.—*E. zuluensis* **sp. n.** Zululand ROBERTS Ann. Transvaal Mus. **10** p. 60 figs.

Kerivoula nidicola zuluensis **subsp. n.** Zululand, ROBERTS Ann. Transvaal Mus. **10** p. 61.

Megapipistrellus **subg. n.** for *Pipistrellus annectens*, BIANCHI Ann. Mus. Zool. Petrograd **21** p. lxxvii.

Miniopterus fuscus yayeyamae **subsp. n.** Riu Kiu Is. p. 6, KURODA **334**.

Murina ognevi **sp. n.** for *M. hilgendorfi* "Peters" subsp. Ognev 1913, BIANCHI Ann. Mus. Zool. Petrograd **21** p. lxxviii.

Myotis lucifagus feeding habits, PITTMAN **490**.—*M. oxygnathus* in Hungary p. 161, ÉHIK **185**.—*M. andersoni* **nom. n.** for *Vespertilio dobsoni*, BIANCHI Ann. Mus. Zool. Petrograd **21** p. lxxix.

Nyctalus siculus in N. Caucasus, TUROV **634**.

Otonycteris jin **sp. n.** Arabia, CHEESMAN & HINTON Ann. Mag. N. H. (9) **14** p. 549.

Paramyotis **nom. subgen. emend.** for *Nystactes* Kaup preocc., BIANCHI Ann. Mus. Zool. Petrograd **21** p. lxxix.

Pareptesicus, for *Eptesicus pachyotis Rhyneptesicus* for *E. nasutus* **subgg. n.**, BIANCHI Ann. Mus. Zool. Petrograd **21** p. lxxvi.

Pipistrellus pipistrellus a renal lymph gland, HARMS **235**.—*P. kuhli ikhwanius* **subsp. n.** Arabia, CHEESMAN & HINTON Ann. Mag. N. H. (9) **14** p. 549.

Rickettia **subg. n.** for *Capaccinius ricketti* Thom., BIANCHI Ann. Mus. Zool. Petrograd **21** p. lxxviii.

Scoteinus influatus **sp. n.** N. Queensland, THOMAS Ann. Mag. N. H. (9) **13** p. 540.

Scotophilus temmincki embryology, especially of external form, KOIKE **311**.

Vesperugo maurus spermatozoa, TOEDTMANN **629**.

EMBALLONURIDAE.

Peronymus cyclops **sp. n.** Peruvian Amazons, THOMAS Ann. Mag. H. H. (9) **13** p. 531.

MOLOSSIDAE.

Cheiromeles torquatus at Singapore, habits and folklore, SWORDER **597**.

Eumops californicus note on the young, HOWELL & LITTLE **264**.—*E. patagonicus* **sp. n.** Patagonia, THOMAS Ann. Mag. N. H. (9) **13** p. 234.

Molossops temminckii sylvia **subsp. n.** Argentina, THOMAS Ann. Mag. N. H. (9) **13** p. 234.

Nyctinomus australis atratus **subsp. n.** South Australia, THOMAS Ann. Mag. N. H. (9) **14** p. 456.

PHYLLOSTOMIDAE.

Artibeus pumilio **sp. n.** Peruvian Amazons, THOMAS Ann. Mag. N. H. (9) **13** p. 531.—*A. fraterculus* **sp. n.** Ecuador, H. E. ANTHONY Amer. Mus. Nov. no. **114** p. 5.

Phyllostomus hastatus paeze Colombia p. 235, *P. h. aruma* C. Brazil p. 236 **subspp. n.**, THOMAS Ann. Mag. N. H. (9) **13**.

Sturnira ludovici **sp. n.** Ecuador, H. E. ANTHONY Amer. Mus. Nov. **139** p. 8.

Vampyressa venilla **sp. n.** Peruvian Amazons, THOMAS Ann. Mag. N. H. (9) **13** p. 533.

Vampyrodes ornatus **sp. n.** Peruvian Amazons, THOMAS Ann. Mag. N. H. (9) **13** p. 532.

Vampyrops lineatus sacrillus **subsp. n.** E. Brazil, THOMAS Ann. Mag. N. H. (9) **13** p. 236.

ORDER INSECTIVORA.

GALEOPITHECIDAE.

Galeopterus hantu **sp. n.** Borneo, CABRERA Bol. Soc. Esp. N. H. **24** p. 128.

Tupaia minor myology, CLARK **141**; structure of brain, CLARK **142**.

†*Tupaiodon* **gen. n.** for *T. morrisi* **sp. n.** p. 1 fig. 1 also ? *T. minutus* **sp. n.** p. 2 Oligocene Mongolia, MATTHEW & GRANGER Amer. Mus. Nov. no. **105**.

MACROSCELIDAE.

Elephantulus capensis, E. vandami **spp. n.** Cape Prov., ROBERTS Ann. Transvaal Mus. **10** p. 62.—*E. rufescens* subsp.? in Ital. Somali discussed p. 258, DE BEAUX **53**.

ERINACEIDAE.

Echinosorex Blainville replaces *Gymnura* Lesson 1827 nec Kuhl 1824, CABRERA **107**.

Erinaceus Oestrous cycle and experiments, COURRIER **151**.—*E. europaeus* hermaphrodite example, BROWN **98**; structure and function of the hypoglossal nerve, SPRENKEL **578**.—*E. meridionalis* **subsp. n.** S. Italy, ALTOBELLO Rend Un. Zool. p. 28 fig. in Monitore Zool. Ital. **35**.

†*Erinaceus mongolicus* **sp. n.** Tertiary Mongolia, SCHLOSSER Palaeont. Sinica ser. C **1** p. 2 figs.

SORICIDAE.

Crocidura cassiteridum **sp. n.** Scilly Is., HINTON Ann. Mag. N. H. (9) **14** p. 509.—*C. watasei* **sp. n.** p. 1, *C. dsinezumi intermedia, C. d. orii* **subspp. n.** Riu Kiu Is., KURODA **334**.

†*Crocidura kormosi* **sp. n.** Tertiary Mongolia, SCHLOSSER Palaeont. Sinica ser. C. **1** p. 5 fig.

Cryptotis parva ranges west to Colorado, F. W. MILLER **409**.

Myosorex transvaalensis **sp. n.** Transvaal, ROBERTS Ann. Transvaal Mus. **10** p. 61.

†*Neomys* (*Crossopus*) *inexpectatus* **sp. n.** Tertiary Mongolia, SCHLOSSER Palaeont. Sinica ser. C. **1** p. 6 fig.

Notisorex crawfordi life history, DIXON **168**.

Pachyura orangiae **sp. n.** Orange F. S. Prov. ROBERTS Ann. Transvaal Mus. **10** p. 61.—*P. caerulea riukiuana* **subsp. n.** Riu Kiu Is. p. 3, KURODA **334**.

†*Palaeoscaptor* **gen. n.** for type *P. acridens* **sp. n.** p. 2 fig. 2; also *P. rectus* **sp. n.** p. 3, MATTHEW & GRANGER Amer. Mus. Nov. no. **105**.

Solisorex **gen. n.** for *S. pearsoni* **sp. n.** Highlands of Ceylon and diagnosis of allied genus *Feroculus* Kelaart, THOMAS Spolia Zeylan. **13** p. 93.

Sorex araneus tomensis **nat.** [? subsp.] **n.** Lake Baikal, TUROV C.R. Acad. Sci. Leningrad **1924** p.111.—*S. gaspensis* **sp. n.** Gaspé, Quebec, ANTHONY & GOODWIN Amer. Mus. Nov. no. **109** p. 1.

Suncus Hempr. & Ehr. 1832 must replace *Pachyura* Sélys-Longchamps, CABRERA **107**.

TALPIDAE.

†*Scaptochirus primaevus* **sp. n.** Tertiary, Mongolia, SCHLOSSER Palaeont. Sinica ser. C. **1** p. 3 figs.

Talpa europaea distribution of the intestinal blood vessels, BARTFELD **49**; anatomy and physiology of the liver and its blood supply, PFUHL **486**; distr. in Jutland, DEGERBØL **160**.

†*Talpa incerta* **sp. n.** Miocene Nebraska, MATTHEW Bul. Amer. Mus. **50** p. 74.

ADIPISORICIDAE.

†*Adipisorex gaudryi* p. 17 figs., TEILHARD **602**.

CHRYSOCHLORIDAE.

Bematiscus rufopallidus **sp. n.** Transvaal, ROBERTS Ann. Transvaal Mus. **10** p. 65.

Chlorotalpa **gen. n.** p. 64 for *Chrysochloris duthiae* Broom, *C. montana* **sp. n.** Transvaal p. 64, ROBERTS t.c.

Eremitalpa **gen. n.** p. 63 for *Chrysochloris granti* Broom, ROBERTS t.c.

Neamblysomus **gen. n.** p. 64 for *Chrysochloris gunningi* Broom, ROBERTS t.c.

ORDER CARNIVORA.

General review of families and genera p. 173, WINGE **669**.

Notes on Persian Carnivora, LÖNNBERG **369**.

The Carnivora of the Belgian Congo, J. A. ALLEN **11**.

A special convolution in the brain, ANTHONY & COUPIN **35**.

The external anatomy and morphology of newly born, DE BEAUX **57**.

ARCTOCYONIDAE.

†*Arctocyonides trouessarti* figs. p. 31, TEILHARD **602**.

MESONYCHIDAE.

†*Dissacus europaeus* p. 19 56 figs., TEILHARD **602**.

†*Andrewsarchus* **gen. n.** for *A. mongoliensis* **sp. n.** U. Eocene of Mongolia, OSBORN Amer. Mus. Nov. **146** p. 1 3 figs.

OXYAENIDAE.

†*Didymoconus* **gen. n.** for type *D. colgatei* **sp. n.** Oligocene Mongolia p. 1 figs. 1–3, *D. berkeyi* **sp. n.** Oligocene Mongolia p. 3 fig. 3, MATTHEW & GRANGER Amer. Mus. Nov. no. **104**.

HYAENODONTIDAE.

†*Amphicticeps* **gen. n.** for type *A. shackelfordi* **sp. n.** Oligocene Mongolia, MATTHEW & GRANGER Amer. Mus. Nov. no. **104** p. 4 figs. 4–5.

†*Hyænodon cruentus* critical remarks and tympanic bullae figured p. 103, SINCLAIR **569**.—*H. pervagus* **sp. n.** Oligocene Mongolia, MATTHEW & GRANGER Amer. Mus. Nov. **104** p. 1.

†*Metapterodon kaiseri* **gen.** et **sp. n.** Mid-Tertiary S.W. Africa, STROMER Sitzb. Ak. Wiss. München **1923** p. 254.

†*Paracynohyaenodon morrisi* **sp. n.** Eocene Mongolia, MATTHEW & GRANGER Amer. Mus. Nov. **104** p. 1.

†*Tricuspiodon rutimeyeri* figs. p. 34, TEILHARD **602**.

URSIDAE.

Ailuropus melanoleucus haunts and habits in Tibet p. 72, WEIGOLD **665**.

Tremarctos lasallei **sp. n.** Colombia, NICEFORO Bol. Soc. Colomb. **13** p. 115 1 pl.

Ursus maritimus on the brain of a newly-born cub, ANTHONY & COUPIN **34**.—*U. arctos* status, distribution and increasing scarcity in Norway, JOHNSEN **279**.—*U. a. jeniseensis* **subsp. n.** Prov. Yenesei p. 4, *U. pamirensis* **sp. n.** Pamirs p. 5, *U. yesoensis* **sp. n.** Yeso p. 5, *U. arctos baikalensis* **subsp. n.** Prov. Irkutzk p. 6, *U. a. kolymensis* **subsp. n.** Kolyma p. 6, OGNEV **443**.—*U. arctos marsicanus* **subsp. n.** S. Italy, ALTOBELLO Rend. Un. Zool. p. 32 fig. in Monitore Zool. Ital. **35**.—*U. lagomyiarius* distrib. in Tibet, WEIGOLD **665**.

†*Ursus spelaeus* decayed and defective teeth, BABIK **38**.

MUSTELIDAE.

On the carpal bones of the Otters, with an account of their adaptation to aquatic life, LUTHE **382**.

†*Brachypsalis matutinus* **sp. n.** Miocene Nebraska p. 133 figs. and other sp. discussed and figured, MATTHEW Bul. Amer. Mus. **50.**

†*Bunaelurus ulysses*, *B. parvulus* **spp. n.** Oligocene Mongolia, MATTHEW & GRANGER Amer. Mus. Nov. no. **104** p. 8 fig. 6 B. C.

Conepatus inca taxinus **subsp. n.** Peru, THOMAS Ann. Mag. N. H. (9) **14** p. 286.

Gulo luscus skull described and figured, SHUFELDT **566.**

Icatonyx capensis obscurata **subsp. n.** Ital. Somali, DE BEAUX Atti Soc. ital. Milano **63** p. 1.—*I. striatus maximus* Transvaal p. 65, *I. s. pondoensis* Pondoland p. 66 **subspp. n.**, *I. orangiae* **sp. n.** Orange Free State Prov. p. 67, *I. o. pretoriae* Pretoria, *I. o. arenarius* Lamberts Bay Cape Prov. **subspp. n.** p. 67, ROBERTS Ann. Transvaal Mus. **10.**

†*Leptarctus wortmani* **sp. n.** L. Pliocene Nebraska p. 142, other species figured and affinities of genus discussed MATTHEW Bul. Amer. Mus. **50.**

Lutra maculicollis animal and skull figured p. 85, J. A. ALLEN **11.**—*L. mesopetes* **sp. n.** Costa Rica, CABRERA Bol. Soc. Esp. H. N. **24** p. 52.

Lutreola itatsi sho **subsp. n.** Riukiu Is. p. 10, KURODA **334.**

†*Martes anderssoni* **sp. n.** Tertiary Mongolia, SCHLOSSER Palaeont. Sinica ser. C **1** p. 13 figs.

Mephitis mesomelas varians habits in Texas, CUYLER **156.**

Micraonyx cinerea generic and other characters with figs. of skulls, etct. p. 94, J. A. ALLEN **11.**

†*Mionictis* **gen. n.** for *M. incertus* **sp. n.** p. 136 figs., *M. elegans* p. 137 **sp. n.** Miocene Nebraska, MATTHEW Bul. Amer. Mus. **50.**

†*Palaeoprionodon gracilis* **sp. n.** Oligocene Mongolia, MATTHEW & GRANGER Amer. Mus. Nov. no. **104** p. 7 figs. 6E 7.

†*Plionictis* **gen. n.** p. 135 for *Mustela ogygia*, *P. parviloba* fig., MATTHEW Bul. Amer. Mus. **50.**

†*Promephitis alexejewi* **sp. n.** Tertiary Mongolia, SCHLOSSER Palaeont. Sinica ser. C **1** p. 11 fig.

†*Sthenictis dolichops* **sp. n.** Miocene Nebraska, MATTHEW Bul. Amer. Mus. **50** p. 135 figs.

†*Trochictis minutus* **sp. n.** Tertiary Mongolia, SCHLOSSER Palaeont. Sinica ser. C **1** p. 10 fig.

CANIDAE.

Phylogeny of Canidae p. 121, MATTHEW **400.**

†*Aelurodon francisi* p. 2, *Ae. simulans* p. 2 text-fig., **spp. n.**, U. Miocene Texas, HAY Proc. Biol. Soc. **37.**

†*Amphicyon ingens* p. 111 figs., *A. frendens* p. 111 fig., *A. idoneus* p. 113 fig., **spp. n.**, Miocene Nebraska, *A. sinapius* figured and discussed p. 109, MATTHEW Bul. Amer. Mus. **50.**—*A. lemanensis* milk-dentition 2 figs., HELBING **246.**

Canis "*dom.*" On the Irish breeds, SCHARFF **532**; Origin of the Shepherd Dog, TRACEY **631**; malformation of the diaphragm, BARNY & DONEGAN **48**; anatomy of an otocephalic monster, CHIDESTER **137.**—*C. lupus italicus* **subsp. n.** S. Italy, ALTOBELLO Rend. Un. Zool. p. 34 fig. in Monitore Zool. Ital. **35.**—*C.* (*Thos*) *mesomelas schmidti* p. 260, *C.* (*T.*) *anthus gallaensis* dimensions etct. Ital Somali, DE BEAUX **53.**

†*Canis arnensis* **sp. n.** Pliocene Italy CAMPANA Riv. Ital. Paleont. **30** p. 48 1 pl.—*C. intermedius newelskii* **subsp. n.** p. 12, *C. kryschtofovitschi* **sp. n.** p. 14 Post-tertiary Amoor basin, BREMNER Mém. Com. Geol. Petrograd Livr. **160.**—*C. morenoi* a skull from Pampean beds, Argentina, described, REVILLIOD **511.**

†*Cynodictis* ? *elegans* **sp. n.** Oligocene Mongolia, MATTHEW & GRANGER Amer. Mus. Nov. no. **104** p. 8 fig. 6A.

†*Cynodon* (*Pachycynodon*) *teilhardi* **sp. n.** Oligocene Mongolia, MATTHEW & GRANGER Amer. Mus. Nov. no. **104** p. 8 fig. 6D.

†*Daphaenus vetus* skull and teeth p. 107 figs 2, 3, SINCLAIR **569**; exostosis in the radius, ROMER **523.**

†*Euoplocyon* **gen. n.** for *E. praedator* **sp. n.** Miocene Nebraska, MATTHEW Bul. Amer. Mus. **50** p. 103.

†*Hyaenognathus direptor* **sp. n.** Pliocene Nebraska, MATTHEW Bul. Amer. Mus. **50** p. 100 fig.

Lycaon pictus somalicus remarks p. 157, DE BEAUX **55.**

Otocyon steinhardti **sp. n.** S. W. Afr. Protect., ZUKOWSKY Arch. Natg. **90** Hft. 1 p. 52 3 figs.

†*Phlaocyon willistoni* **sp. n.** Oligocene ? Colorado, PETERSON Ann. Carnegie Mus. **15** p. 300 figs.

†*Tephrocyon scitulus* **sp. n.** U.Miocene, Texas, HAY Proc. Biol. Soc. **37** p. 3 figs.

†*Tomarctus optatus* **sp. n.** Miocene Nebraska p. 98 figs., *T. brevirostris* p. 91, *T. confertus* p. 96 discussed with figs., MATTHEW Bul. Amer. Mus. **50.**

Thos anthus soudanicus measurements etc. p. 81 pl. 6, J. A. ALLEN **11.**

Vulpes fulva medical treatment for internal parasites, HANSON & VAN VOLKENBERG **232.**

HYAENIDAE.

Crocuta crocuta fortis **subsp. n.** N. E. Belgian Congo, J. A. ALLEN Bul. Amer. Mus. **47** p. 214 pls. 22–25.

VIVERRAVIDAE.

†*Viverravus constans* **sp. n.** Oligocene, Mongolia, MATTHEW & GRANGER Amer. Mus. Nov. no. **104** p. 9 fig. 6F.

VIVERRIDAE.

Review of the Mungooses of the Belgian Congo with nomenclatural discussion of the earlier names of Buffon and Geoffroy and figs. of the animals, skulls, feet, etct., of all the species p. 153, J. A. ALLEN **11.**

Atilax macrodon **sp. n.** Belgian Congo, J. A. ALLEN Bul. Amer. Mus. **47** p. 205 with figs. of skulls, animals, etct.

Civettictis civetta orientalis from N. E. Belgian Congo with figs. of animal, skull, palms, muskpouch, etct., p. 109 J. A. ALLEN **11.**

Cynictis penicillata brachyura Transvaal p. 68, *C. p. bradfieldi* S. W. Afr. p. 69 **subspp. n.,** ROBERTS Ann. Transvaal Mus. **10.**

Genetta rubiginosa zuluensis **subsp. n.** Zululand, ROBERTS Ann. Transvaal Mus. **10** p. 67.—*G. pardina fieldiana* and other Congolese species with figs. of animals, skulls, etct., p. 119, J. A ALLEN **11.**—*G. dongolana tedescoi* **subsp. n.** Ital. Somali, DE BEAUX Atti soc. ital. Milano **62** p. 267.

Helogale hirtula robusta **subsp. n.** Belgian Congo, J. A. ALLEN Bul. Amer. Mus. **47** p. 183 figs. animal and skull.

Herpestes food and economics in Trinidad, WILLIAMS **668.**—*H. flavidens* races reviewed, *H. f. phillipsi* p. 239, *H. f. siccatus* p. 240 Ceylon **subspp. n.,** THOMAS Ann. Mag. N. H. (9) **13.**—*H. ichneumon sangronizi* **subsp. n.** Morocco, CABRERA Bol. Soc. Esp. N. H. **24** p. 217. —*H.* (*Calogale*) *nigripes* **sp. n.** Mongalla, Sudan, KERSHAW Ann. Mag. N. H. (9) **13** p. 22.

Ichneumia albicauda dialeucos described Ital. Somali p. 270, DE BEAUX **53.**

Ichneumonia grandis haagneri **subsp. n.** Transvaal, ROBERTS Ann. Transvaal Mus. **10** p. 68.

†*Ictitherium tauricum* **sp. n.** Miocene ? Crimea, BORISSIAK Mém. Com. Geol. Petrograd livr. 137 1915 pp. 17, 40 figs.

Osbornictis piscivora addt. descript. of genus and species with col. figs. of animal and figs. of skull, rhinarium, feet, etct., p. 135, J. H. ALLEN **11.**

Paradoxurus philippensis baritensis **subsp. n.** C. Borneo, LÖNNBERG Nyt Mag. Naturw. **62** p. 61.

Rhynchogale canipes **sp. n.** Tanganyika Terr., KERSHAW Ann. Mag. N. H. (9) **13** p. 79.

Xenogale microdon addt. descript. of generic and specific characters, figs., animal, skulls, feet, etct., p. 199, J. A. ALLEN **11.**

FELIDAE.

Aelurictis minor of Madagascar affinities discussed and jaw figured, JOLEAUD **281.**

Felis "*dom.*" early stages of development, HILL & TRIBE **253**; origin and development of heart, WATSON **659**; papilliform structure on the lips of the newly born, ANSON, **24**; genetics of Siamese cats, TJEBBES **628.**—*F. tigris* in Singapore Island, STEAD **581.**—*F. pardus* Grave's disease, LUCAS **279.**—*F. temmincki bainsei* **subsp. n.** Yunnan,

SOWERBY China J. Sci. Arts **2** p. 352.—*F. chutuchta* **sp. n.** Gobi desert, *F. ornata nesterovi* **subsp. n.** Mesopotamia, BIRULA Ann. Mus. Zool. Petrograd **21** p. i.—*F. capensis ferrarii* **subsp. n.** Ital. Somali, DE BEAUX Atti soc. ital. Milano **63** p. 4.—*F. caracal* type locality and authority p. 279, J. A. ALLEN **11.**—*F. lybica cyrenarum* **subsp. n.** Cirenaica Ghigi Mem. Acc. Sci. Bologna (7) **7** p. 79.—*F. molisana* **sp. n.** S. Italy, ALTOBELLO Rend. Un. Zool. p. 35 in Monitore Zool. Ital. **35.**—*F.* (*Panthera*) *pardus nanopardus* in Ital. Somali and other African races discussed p. 373, DE BEAUX **53.**

†*Felis leo spelaea* skulls from south Russia described and figured, RIABININ **512.**—*F. pardus* on part of a lower jaw found in recent beds at Mosbach, SCHMIDTGEN **545.**

†*Hoplophonĕus primaevus, H. robustus* skulls figured with crit. remarks p. 113 figs. 5, 6, SINCLAIR **569.**

Leo leo type locality and African races discussed p. 220, *L. l. azandicus* N. E. Belgian Congo p. 224, *L. l. hollisteri* Kenya Colony p. 229, **subspp. n.,** photos and figs. of skulls, J. H. ALLEN Bul. Amer. Mus. **47.**

Leptailurus serval faradjius **subsp. n.** N.E. Belgian Congo and other races discussed, J. A. ALLEN Bul. Amer. Mus. **47** p. 267 many figs.

Lynx ruffus revision of Californian races, GRINNELL & DIXON **223.**

†*Machaerodus* (*Heterofelis*) *catocopis* fig. p. 147, MATTHEW **400.**

Otocolobus manul nigripectus (Hodgs.) a distinct race from the Himalayas with latin diagnoses, plates and text-figures, BIRULA **69.**

Panthera nomenclature, type localities and races of African Leopards discussed p. 248, *P. pardus iturensis* **subsp. n.** Belgian Congo p. 259, J. A. ALLEN Bul. Amer. Mus. **47** many figs. and photos.

ORDER PINNIPEDIA.

Structure and development of the limbs of Seals, BROMAN **95.**

Seal oil and its production, GAVER **208.**

OTARIIDAE.

Arctocephalus ursinus, Govt. report of Behring sea industry, BOWER, **90**; temperature records, HANNA **230.**

PHOCIDAE.

Mirounga angustirostris status and field-notes, A. W. ANTHONY **25**; HUEY **269.**

Monachus albiventer on the Atlantic coast of Morocco near Cape Blanco, MONOD **419.**

ORDER RODENTIA.

General review of families and genera p. 1, WINGE **669.**

Rodents from N. Caucasus, OGNEV **440.**

Some Uganda Rodents, DE BEAUX **52.**

Anatomy of tongues of Rodents, SONNTAG **576.**

Haemoglobin crystals in Rodents, KRUMMACHER **328.**

Rats (*Rattus rattus* and *Acomys cahirinus*) and plague in Egypt, PETRIE & OTHERS **485.**

Rodents and arboriculture, SILVER **568.**

INCERT. SEDIS.

†*Diamantomys luederitzi* addt.description p. 265, STROMER **593.**

†Sp. aff. *Phiomys andrewsi* in Mid-tertiary S. W. Africa p. 264, STROMER **593.**

†*Pomonomys dubius* addt. descript. p. 265, STROMER **593.**

PLESIADAPIDAE.

†*Protoadapis angustidens* figured and described p. 96, TEILHARD **602.**

ANOMALURIDAE.

†*Dipoides* cf. *majori* in Mongolia p. 27 figs., SCHLOSSER **542.**

MYLAGAULIDAE.

†*Mylagaulus vetus* p. 82 figs., *M. novellus* p. 84, **spp. n.,** Miocene Nebraska, *M. laevis* figs. p. 78, MATTHEW Bul. Amer. Mus. **50.**

SCIURIDAE.

Citellus mugosaricus herbicola **nafio n.** Kirghiz Steppes, Latin diagn., MARTINO Ann. Mus. Zool. Petrograd **21** p. 278.—*C. columbianus* field-observations and habits, SHAW **561.**

Cynomys gunnisoni zuniensis economics in Arizona, TAYLOR & LOFTFIELD **601**; diagrams of burrows, FOSTER **200.**

Eupetaurus cinereus note on habits, with photos, LORIMER **378.**

Funambulus layardi signatus **subsp. n.** Ceylon, THOMAS Ann. Mag. N. H. (9) **13** p. 241.

Marmota monax petrensis skull measurements p. 382, SWARTH **596.**

Sciurus vulgaris distrib. in Ireland, RUTTLEDGE **525**; wanderings and the seeding of *Picea abies* in Denmark, JENSEN **278**; structure of the lips, SCHUMACHER **552.**—*S. v. ameliae* **subsp. n.** Greece, CABRERA Bol. Soc. H. N. Madrid **24** p. 420.—*S. carolinensis* in Yorkshire, WATT & ST. QUINTIN **660.**—*S. hudsonius* field-notes, CRAM **152.**—*S. vittatus lighti* Penang I., *S. v. stellaris* Bintang I., *S. v. lunaris* Bulan I., **subspp. n.,** CHASEN & KLOSS J. Malay R. Asiat. Soc. **2** p. 58.

CASTORIDAE.

Castor canadensis beaver-farming, BAILEY **42.**

†*Castor fiber* on a series of skulls from Cambridgeshire fen district 3 pls., MONTAGU **420.**

†*Chalicomys anderssoni* **gen.** et **sp. n.** Tertiary Mongolia, SCHLOSSER Palaeont. Sinica ser. C. **1** p. 22 figs.

APLODONTIDAE.

†*Aplodontia asiatica* **sp. n.** Tertiary Mongolia, SCHLOSSER Palaeont. Sinica ser. C. **1** p. 30 figs.

MYOXIDAE.

Dyromys nitedula in gouv. Riasan notice, TOUROFF **637.**

Glis glis abruttii **subsp. n.** S. Italy, ALTOBELLO Rend. Un. Zool. p. 30 fig. in Monitore Zool. Ital. **35.**

Myomimus **gen. n.** p. 1 for *M. personatus* **sp. n.** p. 2 fig. Transcaspia [nr. *Typhlomys*], OGNEV **442.**

Myoxus distribution of Russian species, BIRULA **71.**

MURIDAE.

Apodemus agrarius septentrionalis **subsp. n.** N. Caucasus p. 45, OGNEV **440.**—*A. gurkha* **sp. n.** Nepal, THOMAS J. Bombay N. H. Soc. **29** p. 888.—*A. geisha tanei*, *A. speciosus dorsalis* **subspp. n.,** Riukiu Is. p. 9, KURODA **334.**

Arbusticola rubellianus ciscaucasicus **subsp. n.** N. Caucasus p. 34, OGNEV **440.**

Arvicanthis somalicus reptans descript. and measurements p. 161, DE BEAUX **55.**

Chionomys personatus **sp. n.** N. Caucasus p. 39, OGNEV **440.**

Craseomys rufocanus bargusinensis **subsp. n.** Lake Baikal, TUROV C. R. Acad. Sci. Leningrad **1924** p. 110.

Cricetulus phaeus in gouv. Riasan, Russia, TOUROFF **637.**—*C. fulvus pamirensis* **subsp. ? n.** Pamir p. 89 3 figs., OGNEV **441.**—*C. migratorius pulcher* **subsp. n.** N. Caucasus p. 22, OGNEV **440.**

Cricetus cricetus on the black form and its "fixed" condition and on the distribution of the species, STACH **579.**—*C. frumentarius* physiology of respiration during hybernation, ENDRES **189.**

Dasymys shawi **sp. n.** Bahr el Ghazal, KERSHAW Ann. Mag. N. H. (9) **13** p. 25.

Dendromus (*Poemys*) *arenarius* **sp. n.** loc. ? with key to other species, ROBERTS Ann. Transvaal Mus. **10** p. 71.

Dicrostonyx groenlandicus in Baffinland, ALLEN & COPELAND **10.**

Ellobius larvatus p. 11, *E. orientalis* p. 12, **spp. n.,** Mongolia, G. M. ALLEN Amer. Mus. Nov. no. **133.**

Epimys rattus alexandrinus no. of mammae, DELANOE **161.**

Evotomys (*Craseomys*) *irkutensis* Irkutsk Prov., Siberia p. 69 5 figs., *E. baikalensis* Lake Baikal p. 73 3 figs., *E. laticeps* Irkutsk Prov. p. 75 3 figs., *E. parvidens* Irkutsk Prov. p. 77 3 figs., **spp. n.,** OGNEV **441.**—*C. otus* **sp. n.** Lake Baikal, TUROV C.R. Acad. Sci. Leningrad **1924** p. 110.—*E. grapperi saturatus* a tree-inhabiter, SHAW **563.**

Fiber zibethicus moving its young, E. H. WARREN **657**.

Gerbillus arduus **sp. n.** Arabia, CHEESMAN & HINTON Ann. Mag. N. H. (9) **14** p. 551.

Grammomys surdaster ranges to Bahr el Ghazal p. 24, KERSHAW **298**.

Ichthyomys nicefori **sp. n.** Bogotá, THOMAS Ann. Mag. N. H. (9) **13** p. 165. —*I. caurinus* **sp. n.** Ecuador id. ibid. p. 541.

Konemys isseli **gen.** et **sp. n.** Uganda, DE BEAUX Ann. Mus. Civ. Genova **51** p. 207.

Leggada bella kasaica **subsp. n.** Kasai Belgian Congo, CABRERA Bol. Soc. Esp. N. H. **24** p. 222.

Lemmus lemmus periodic fluctuations in number, ELTON **187**.—*L. trimucronatus* winter coat, in Baffinland, ALLEN & COPELAND **10**.—*L. amurensis* **sp. n.** Amoorland p. 186, *L. obensis novosibericus* **subsp. n.** New Siberian Is. p. 187, VINOGRADOV Ann. Mag. N. H. (9) **14**.

†*Lophocricetus grabani* **gen.** et **sp. n.** Tertiary Mongolia, SCHLOSSER Palaeont. Sinica ser. C. **1** p. 41 figs.

Melomys cervinipes eboreus **subsp. n.** N. Queensland p. 297, *M. australius* Cape York p. 298, *M. rubicola* Torres Str. p. 299, **spp. n.**, THOMAS Ann. Mag. N. H. (9) **13**.

Meriones ismahelis p. 553, *M. arimalius* p. 554, **spp. n.**, *M. syrius edithae*, *M. s. evelynae* p. 555, **subspp. n.** Arabia, CHEESMAN & HINTON Ann. Mag. N. H. (9) **14**.

Mesembriomys hirsutus rattoides **subsp. n.** Cape York, Australia, THOMAS Ann. Mag. N. H. (9) **13** p. 296.

Microtus bionomics and economics, BAILEY **41**.—*M. montanus yosemite* individual variation, HOWELL **261**.—*M. hirtus orivoecus* **subsp. n.** Catalonia and other Catalonia forms noticed, CABRERA Publ. Cien. Nat. Barcelona **7** no. 3 p. 8 3 figs.—*M. agrestis pannonicus* **subsp. n.** Hungary, ÉHIK Ann. Mus. Budapest **21** p. 76.—*M. arvalis macrocranius*, *M. a. rossiae-meridionalis* **subspp. n.** p. 27, *M. brevirostris* **sp. n.** p. 32 N. Caucasus, OGNEV **440**.—*M. poljakowi* p. 85, *M. oeconomus* p. 86 skulls figured, OGNEV **441**.—*M. uchidæ* **sp. n.** Kurile Is., Japan, KURODA J. Mamm. **5** p. 118.—*M.* (*Chionomys*) *marakovići* **sp. n.** Bosnia BOLKAY Biol, Hung. 1 fasc. 2–3 p. 4 figs.—*M.* (*Anteliomys*) *custos rubellus* Li-chiang Yunnan p. 5, *M.* (*Alticola*) *worthingtoni semicanus* Mongolia p. 6, *M. mandarinus faeceus* Chihli China p. 8, **subspp. n.** and notes on other E. Asiatic species, G. M. ALLEN Amer. Mus. Nov. **133**.

Microxus latebricola **sp. n.** Ecuador H. E. ANTHONY Amer. Mus. Nov. **139** p. 3.

Mus histology of pancreas, HETT **252**.—*M. musculus* segmentation of ovum, SOBOTTA **573**; ossification of the limb-bones, PETCOFF **482**; structure of the epididymis, LANZ **344**.—*M. rattus* at Bordeaux, CHAINE **132**.—*M. norvegicus* laboratory data, anatomy and physiology, DONALDSON **169**.—*M. spicilegus heroldi* and *M. s. germanicus* ranges and habitats, KRAUSSE **319**.—*M. kurilensis* **sp. n.** Kurile Is., Japan, KURODA J. Mamm. **5** p. 119.—*M. molossinus orii* p. 7, *M. m. yonakuni* p. 8, **subspp. n.**, Riukiu Is., KURODA **334**.

†*Mus hipparionum* **sp. n.** Tertiary Mongolia, SCHLOSSER Palaeont. Sinica ser. C. **1** p. 43 figs.

Myopus saianicus in Mongolia p. 2, G. M. ALLEN **7**.

Œcomys melleus **sp. n.** Ecuador, H. E. ANTHONY Amer. Mus. Nov. **139** p. 4.—*Œ. osgoodi* **sp. n.** Peru, THOMAS Ann. Mag. N. H. (9) **14** p. 287.

Oryzomys ratticeps list of races, *O. r. tropicus* S. Brazil p. 143, *O. r. paraganus* Paraguay p. 144, THOMAS Ann. Mag. N. H. (9) **14** —*O. balneator hesperus* **subsp. n.** Ecuador, H. E. ANTHONY Amer. Mus. Nov. **139** p. 7.

Otomys irroratus maximus N. W. Rhodesia p. 70, *O.* (*Lamotomys*) *laminatus pondoensis* Pondoland p. 71, **subspp. n.**, ROBERTS Ann. Transvaal Mus. **10**.—*O. tropicalis ghigii* **subsp. n.** Uganda, DE BEAUX Ann. Mus. Civ. Genova **51** p. 213.

†*Paomys* **gen. n.** for *P. rivicola* **sp. n.** Miocene Nebraska, MATTHEW Bul. Amer. Mus. **50** p. 86 figs.

Peromyscus maniculatus races in Bt. Columbia p. 374, SWARTH **596**; experiments in breeding under changed environment, SUMNER **594**.—*P. m. gambeli* breeding notes, SCHAFFER **538**.—*P. slevini* **sp. n.** L. California, MAILLIARD Proc. Cal. Acad. Sci. (4) **12** p. 955 3 figs.

Phenacomys olympicus life-history, SHAW **562**.

Phyllotis fuscus **sp. n.** Ecuador, H. E. ANTHONY Amer. Mus. Nov. no. **114** p. 1.

Pitymys flavescens **sp. n.** Catalonia, CABRERA Publ. Cien. Nat. Barcelona **7** no. 3 p. 13 3 figs.—*P. transsylvanicus* **sp. n.** Hungary, ÉHIK Ann. Mus. Budapest **21** p. 159.

Rattus hawaiiensis characters and relationships, G. S. MILLER **410**.—*R. brevicaudatus* a "Rattenkonige" teratological, MOHR **416**.

Scolomys **gen. n.** p. 1 for *S. melanops* **sp. n.** p. 2 4 figs. E. Ecuador, H. E. ANTHONY Amer. Mus. Nov. **139**.

Sigmodon inopinatus **sp. n.** Ecuador, H. E. ANTHONY Amer. Mus. Nov. **114** p. 3.

†*Sigmodon atavus* **sp. n.** Tertiary Mongolia, SCHLOSSER Palaeont. Sinica ser. C. **1** p. 42 figs.

†*Siphneus eriksoni* **sp. n.** Tertiary Mongolia, SCHLOSSER Palaeont. Sinica ser. C. **1** p. 36 figs.

Stenocranius kossogolicus N. W. Mongolia p. 80 3 figs., *S. buturlini* N. Siberia, *S. major* Yamal Pen p. 83 **spp. n.**, OGNEV **441**.

Sylvaemus sylvaticus fulvipectus p. 47, *S. s. ciscaucasicus* p. 48, **subsp. n.** N. Caucasus, OGNEV **440**.—*S. s. majusculus* **subsp. n.** Lake Baikal, TUROV C.R. Acad. Sci. Leningrad 1924 p. 110.

Taterillus zammaranoi remarks p. 160, DE BEAUX **55**.

Thomasomys silvestris **sp. n.** Ecuador, H. E. ANTHONY Amer. Mus. Nov. **114** p. 2.—*T. cinnameus* **sp. n.** p. 5, *T. rhoadsi fumeus* **subsp. n.** p. 6 Ecuador, H. E. ANTHONY Amer. Mus. Nov. **139**.

SPALACIDAE.

†*Rhizospalax poirrieri* dentition, skeleton, phylogeny and geol. horizon, STEHLIN **588**.

Spalax monticola note on Hercegovinan race p. 5, BOLKAY **77**.—*S.* (*Mesospalax*) *hungaricus* burrows, digging and other habits in Hungary, MONTAGU **421**.

GEOMYIDAE.

Geomys bursarius the pubic symphysis and gestation, HISAW **257**.

ISCHYROMIDAE.

†*Paramys lemoinei* **sp. n.** Eocene France, TEILHARD Ann. Palaeont. Paris **11** p. 77 figs.

HETEROMYIDAE.

Dipodomys microps celsus, *D. ordii cuspidineus* **subspp. n.** Arizona, GOLDMAN J. Washington Acad. **14** p. 372.

†*Peridiomys* **gen. n.** for *P. rusticus* **sp. n.** Miocene Nebraska [nr. *Perognathus*], MATTHEW Bul. Amer. Mus. **50** p. 85 figs.

†*Sminthoides fraudator* **gen.** et **sp. n.** Tertiary Mongolia, SCHLOSSER Palaeont. Sinica ser. C. **1** p. 34 figs.

BATHYERGIDAE.

†*Bathyergoides neotertiarius* **gen.** et **sp. n.** Mid-tertiary S.W. Africa, STROMER Sitzb. Ak. Wiss. München **1923** p. 263.

Cryptomys cradockensis Cradock, *C. bigalkei* O. F. S. Prov., *C. transvaalensis* Pretoria **spp. n.**, ROBERTS Ann. Transvaal Mus. **10**.

JACULIDAE.

Alactaga jaculus fuscus **subsp. n.** N. Caucasus p. 8, OGNEV **440**.

†*Alactaga wimani* **sp. n.** Tertiary Mongolia, SCHLOSSER Palaeont. Sinica ser. C. **1** p. 31.

Jaculus florentiae **sp. n.** C. Arabia p. 556, *J. f. oralis* **subsp. n.** N. E. Arabia p. 557, CHEESMAN & HINTON Ann. Mag. N. H. (9) **14**.

Napaeozapus insignis abietorum habits, SNYDER **572**.

Salpingotus crassicauda **sp. n.** Gobi-Altai Vinogradov Zool. Anz. **61** p. 150 5 figs.

PEDETIDAE.

†*Parapedetes namaquensis* **gen.** et **sp. n.** Mid-tertiary S.W. Africa, STROMER Sitzb. Ak. Wiss. München **1923** p. 261.

CTENODACTYLIDAE.

The Ctenodactylinae of North Africa distr. habits, JOLEAUD **280.**

†*Neosciuromys africanus* addt. information p. 263, STROMER **593.**

OCTODONTIDAE.

Echimys longirostris addt. descript. figs. skull p. 273, H. E. ANTHONY **29.**

Isothrix villosa molliae **subsp. n.** Peruvian Amazons, THOMAS Ann. Mag. N. H. (9) **13** p. 534.

Mesomys ferrugineus spicatus **subsp. n.** Peruvian Amazons, THOMAS Ann. Mag. N. H. (9) **13** p. 535.

Proechimys hilda **sp. n.** Peruvian Amazons, THOMAS Ann. Mag. N. H. (9) **13** p. 534.

HYSTRICIDAE.

Hystrix occidanea **sp. n.** Morocco, CABRERA Bol. Soc. Esp. N. H. **24** p. 220 3 figs.

†*Phiomyoides humilis* **gen.** et **sp. n.** Mid-tertiary S.W. Africa, STROMER Sitzb. Ak. Wiss. München **1923** p. 264.

COENDIDAE (ERETHIZIDAE).

Coendou villosus temperature and metabolism, OZORIO & GALVAO **456.**

Erethizon epixanthum couesi in Colorado, F. W. MILLER **408.**

AGOUTIDAE.

Dasyprocta aguti flavescens individual variation and taxonomy p. 272, H. E. ANTHONY **29.**

CAVIIDAE.

Cavia cobaya morphology of carpus, VALLOIS **640**; structure of epididymis POHL **495**; malformed genetal organs, LIPSCHÜTZ **356.**

Stictomys **gen. n.** for *Coelogenys taczanowskii* Stolzm., THOMAS Ann. Mag. N. H. (9) **13** p. 238.

OCHOTONIDAE.

†*Austrolagomys inexpectatus* **gen.** et **sp. n.** Mid-Tertiary S. W. Africa, STROMER Sitzb. Ak. Wiss. München **1923** p. 261.

Ochotona revision of the genus with distr. habits, economics etct.; *O. princeps brooksi* Bt. Columbia p. 30, *O. schisticeps goldmani* Idaho p. 40, **subspp. n.**, HOWELL N. Amer. Fauna no. **47.**—*O. swatoshi* **sp. n.** Lake Baikal, TUROV C. R. Acad. Sci. Leningrad **1924** p. 110.—*O.* (*Ogotoma*) *sushkini* **sp. n.** Altai Mts., THOMAS Ann. Mag. N. H. (9) **13** p. 163.

†*Ochotona lagreli* **sp. n.** Tertiary Mongolia, SCHLOSSER Palaeont. Sinica ser. C 1 p. 49 figs.

LEPORIDAE.

Lepus "*dom.*" some white breeds CASTLE **124**; genetics of Japanese race, CASTLE **123**; PUNNETT **502**; on the secretion of the Harderian gland, MULON & DUBOC **430.**—*L. europaeus* in N. America, its introduction, distribution and economics, SILVER **567.**—*L. europaeus* and *L. varronis*, the various distinctive characters analyzed and the other races discussed, BODMER-GIGER **74.**—*L. americanus columbiensis* measurements and critical notes p. 384, SWARTH **596.**—*L. arcticus* in Baffinland skull measurements, ALLEN & COPELAND **10.**—*L. microtis* taxonomy and addt. descript. p. 25, KERSHAW **298.**—*L. barcaeus* **sp. n.** Cirenaica, GHIGI Mem. Acc. Sci. Bologna (7) **7** p. 81.

†*Lepus annectens* **sp. n.** Tertiary Mongolia, SCHLOSSER Palaeont. Sinica ser. C **1** p. 45 figs.

Pronolagus randensis powelli Rustenburg, *P. r. makapani* Potgietersrust, **subspp. n.**, ROBERTS Ann. Transvaal Mus. **10** p. 75.—*P. crassicaudatus vallicola* **subsp. n.** Kenya Colony, KERSHAW Ann. Mag. N. H. (9) **13** p. 80.

ORDER TILLODONTIA.

†The Notostylops fauna and their co-existence with Dinosaurs in the Cretaceous-Eocene beds of S. America pp. 276–289, IHERING **271.**

ORDER UNGULATA.

Catalogue of East African Ungulata in the U. S. National Museum, HOLLISTER **259**.

General review of families and genera p. 1, WINGE **669**.

SUBORDER HYRACOIDEA.

PROCAVIIDAE (HYRACIDAE).

Dendrohyrax adersi **sp. n.** Pemba I. E. Africa, KERSHAW Ann. Mag. N. H. (9) **13** p. 557.

Hyrax capensis placenta studies pls. & figs., THURSBY-PELHAM **627**.

Procavia capensis natalensis Natal, *P. c. coombsi* W. Transvaal, **subspp. n.**, ROBERTS Ann. Transvaal Mus. **10** p. 76. —*P.* (*Heterohyrax*) *pumila* in Ital. Somali dimensions etct. p. 284, DE BEAUX **53**.

†*Prohyrax tertiarius* **gen.** et **sp. n.** Mid-tertiary S. W. Africa, STROMER Sitzb. Ak. Wiss. München **1923** p. 256.

MYOHYRACIDAE.

Myohyracoidea **subord. n.** pp. 257–259, STROMER **593** for.

†*Myohyrax doederleini* **sp. n.** Mid-tertiary S. W. Africa, STROMER Sitz. Ak. Wiss. München **1923** p. 257.

SUBORDER TYPOTHERIA.

†*Typotherium eguiai* on a mandible with supposed human work, VIGNATI **644**.

SUBORDER CONDYLARTHRA.

†*Pleuraspidotherium aumonieri* figs. p. 38, TEILHARD **602**.

SUBORDER AMBLYPODA.

†*Eudinoceras* **gen. n.** for *E. mongoliensis* **sp. n.** U. Eocene Mongolia, OSBORN Amer. Mus. Nov. **145** p. 2 2 figs.

SUBORDER ANCYLOPODA.

CHALICOTHERIDAE.

†*Schizotherium turgaicum* **sp. n.** Miocene ? Turgai, Mongolia, BORISIAK Bul. Acad. Sci. Petrograd (6) **13** p. 689 1 pl.

SUBORDER PROBOSCIDEA.

Evolution of Sirenia and Proboscidea from a common stock, ANDREWS **22**.

Phylogeny of the Elephants, STEFANESCU **584**.

Method and mecanism of tooth-change in Elephants, STEFANESCU **583**.

Phylogeny of the carpus of the Proboscidea, GAWRILENKO **209**.

Notes on Elephants in Equatorial Africa with a series of fine photographs, MAXWELL **403**.

The fossil Elephants of Minnesota, STAUFFER **530**.

DINOTHERIIDAE.

†*Dinotherium* notes on the species and their succession, AIRAGHI **5**; on a skull from the Indian Miocene *D. indicum* and *D. pentapotamiae* probably = *D. giganteum* 3 pls., PALMER **461**.—*D. gigantissimum* jaws from Miocene of the Ukraine figured, SERGUÉEV **559**.

ELEPHANTIDAE.

Elephas structure of turbinal bones, ANTHONY & COUPIN **33**.

†*Elephas* on the pliocene and post pliocene species of Great Britain, PONTIER **499**; structure of molars of extinct forms, STEFANESCU **585**.—*E. primigenius* recent finds in Denmark, NORDMANN **439**; molars from diluvial of Lombardy figured, AIRAGHI **6**; a tusk from the Canadian Arctic Archipelago figs., KINDLE **302**.—*E. antiquus* Pliocene ? Cambridge figs., COOPER **145**; in Essex Pleistocene figs., S. H. WARREN **658**.—*E. planifrons* and *E. antiquus* in post-tertiary beds of Roumania, STEFANESCU **586**.

Loxodonta africana field-notes on the race of S. W. Afr. Protect. p. 68, ZUKOWSKY **678**.

†*Mastodon* a review of the Hungarian material in the Budapest Museum, phylogeny, geol. distr. etct., SCHLESINGER **540**.

†*Serridentinus mongoliensis* **sp. n.** L. Miocene Mongolia, OSBORN Amer. Mus. Nov. **148** p. 1 fig. 1.

SUBORDER PERRISODACTYLA.

HYRACOTHERIIDAE.

†*Hyracotherium* sp. Eocene Meudon figs. p. 52, TEILHARD **602**.

†*Propachynolophus maldani* affinities, etct., ? Artiodactyle figs. p. 68, TEILHARD **602**.

PALAEOTHERIIDAE.

†*Archaeohippus penultimus* **sp. n.** Miocene Nebraska, MATTHEW Bul. Amer. Mus. **50** p. 158.

†*Mesohippus bairdi* molar variation p. 123 fig. 8, SINCLAIR **569**.

†*Miohippus blackbergi* p. 4, *M. navasotae* p. 5 figs., **spp. n.**, U. Miocene Texas, HAY Proc. Biol. Soc. **37**.

†*Palaeotherium magnum* a fresh reconstruction with figs., ABEL **2**.

RHINOCEROTIDAE.

The phylogeny and classification of the Rhinocerotidae with diagnoses of the group 36 figs., BREUNING **93**.

Structure, distribution and phylogeny of Chinese fossil Rhinoceroses, RINGSTRÖM **515**.

Lower mandible of a small Rhinocerid from Miocene beds of Turgai figured and described, BORISŬAK **83**.

†*Aceratherium zernowi* skull from Crimea figured pp. 12, 36, BORISSŬAK **87**.—*A. habereri* teeth and bones from Mongolia described and figured p. 54, SCHLOSSER **542**.

†*Aphelops malacorhinus mutilus* **subsp. n.** Pliocene ? Nebraska, MATTHEW Bul. Amer. Mus. **50** p. 150 figs.

†*Baluchitherium* general account, ABEL **1**.—*B. mongoliensis* **sp. n.** L. Miocene, Mongolia, OSBORN Amer. Mus. Nov. **148** p. 3 figs.

†*Cardurcotherium ardynense* addit. descript. and information 3 figs., OSBORN **450**.

†*Ceratorhinus tagicus* race *moguntiana* race **n.** ? Oligocene Germany, ROMAN **522**.

Ceratotherium simum present status and threatened extinction, LANG **338**.

†*Chilotherium* **gen. n.** no type p. 26, *C. anderssoni* p. 26, *C. gracile* p. 46, *C. planifrons* p. 47, *C. wimani* p. 49, **spp. n.**, *C. habereri* **var.** *laticeps* **var. n.** p. 42 many figures Tertiary N. China Ringström Palaeont. Sinica ser. C **1** fasc. 4.

†*Diceratherium palaeosinense* **sp. n.** Tertiary N. China, RINGSTRÖM Palaeont. Sinica ser. C **1** fasc. 4 p. 104 many figs.

†*Dicerorhinus orientalis* bones from N. China described and figured p.5, RINGSTRÖM **515**.

Indracotherium **gen. n.**, BORISŬAK Bul. Acad. Sci. Petrograd 1917 p. 1, on the ostelogy ibid. p. 287 18 figs.; osteology, BORISIAK **80**; a restoration, BORISŬAK **85**.—*I. asiaticum* Oligocene of Torgai C. Asia, description and figures, BORISSIAK **88**.

†*Sinotherium lagrelii* full descript. and figures Tertiary North China p. 123, RINGSTRÖM **515**.

†*Paracaenopus* **gen. n.** for *Praeceratherium filholi* Ost., BREUNING Verh Zool.-Bot. Ges. Wien **73** p. 17.

†*Paraceratherium*, *Baluchitherium* and *Indricotherium* history of discoveries, affinities, status of names and restorations, BORISSIAK **86**.

†*Peraceratherium bugtiense* skull, dentition and affinities figs., COOPER **144**.

†*Rhinoceros antiquitatis* general account phylogeny and a new restoration pl. xvi, HILZHEIMER **254**; skull figured from diluvial beds of Holland, GERTH 212.

TAPIRIDAE.

†*Colodon occidentalis* palate figured p. 121 fig. 7, SINCLAIR **569**.—*C. orientalis* **sp. n.** Miocene ? of Targai Mongolia, BORISIAK Bul. Acad. Sci. Russ. (6) **12** p. 1319 1 fig.

Tapirus anulipes **sp. n.** Matto-Grosso Brazil, HERMANN Mitt. Zool. Mus. Berlin **11** p. 167.

†*Griphodon peruvianus* **gen.** et **sp. n.** [nr. *Tapirus*] ? age Peru, H. E. ANTHONY Amer. Mus. Nov. **111** p. 1 1 fig.

EQUIDAE.

A note on the ancestry of the horse, MATTHEW **399**.

Equus caballus development of the shoulder and limb muscles, SCHAUDER **535, 536, 537**; reduction of the ulna in development, DRAHN **173**; ossification of the ribs, EBERT **182**; the heart-ossicle, KATSCHINSKY **290**; cytology of vas deferens, CUTORE **155**; chromosomes in spermatogenesis p. 229, PAINTER **460**; abnormal right cardiac atrium, METTAM **406**; abnormal broncho-oesophageal artery, DRAHN **172**.

†*Equus* a review of the Pleistocene horses of Germanywith special reference to dentition, *E. altidens, E. marxi, E. steinheimensis*, **spp. n.**, pp. 25–29 and list of subgenera, REICHENAU **506**; a XV century skull in Poland, MARCHLEWSKI **393**; Quaternary race in Poland and Bohemia, MARCHLEWSKI **394**.

†*Hipparion* relation of New and Old World species p. 172, MATTHEW **400**.—*H. richthofeni mongolicum* "new race" Tertiary Mongolia, SCHLOSSER Palaeont Sinica p. 63 figs.

Hippotigris chapmani kaokensis p. 82 2 photos. 1 fig.; *H. hartmannae matschei* p. 90 1 photo, **subspp. n.**, S. W. Afr. Protect., ZUKOWSKY Arch. Natg. **90** A Hft. 1; also further remarks pp. 165–168.

†*Merychippus paniensis* and other Snake bed spp. discussed and figured p. 159, MATTHEW **400**.—*M. vellicans* p. 7, *M. socius, M. francisi* p. 9 figs. U. Miocene Texas, HAY Proc. Biol. Soc. **37**.

†*Parahippus integer* **sp. n.** Miocene Nebraska, MATTHEW Bul. Amer. Mus. **50** p. 154 figs.—*P. minutalis* **sp. n.** U. Miocene Texas, HAY Proc. Biol. Soc. **37** p. 6 figs.

†*Plesippus* **gen. n.** for type? *Equus simplicidens* Cope, MATTHEW Amer. Mus. Nov. **131** p. 2.

SUBORDER ARTIODACTYLA.

The elastic tendons in the toes of Artiodactyls, HEIDSIECK **245**.

HOMACODONTIDAE (PANTOLESTIDAE).

†*Paroxyclaenus lemuroides* **gen.** et **sp. n.** Eocene, Quercy Phosphorites, France, TEILHARD Ann. Pal. Paris **11** p. 77 figs.

ANTHRACOTHERIIDAE.

†*Hemimeryx turgaicus* **sp. n.** Miocene Mongolia, BORISIAK Bul. Acad. Sci. Russ. (6) 17 p. 104 3 figs.

SUIDAE.

The form and function of the teeth of the Entelodonts, MARINELLI **396**.

Phylogeny of the Dicotylidae p. 176, MATTHEW **400**.

†*Archaeotherium mortoni* corrected fig. of skull p. 125 fig. 9, SINCLAIR **569**.

†*Diamantohyus africanus* fossil in S.W. Afri. p. 254, STROMER **593**.

†*Macrogenis* **subg. n.** for *Prosthennops crassigenis* Gidley, MATTHEW Bul. Amer. Mus. **50** p. 179.

Pecari tajacu macrocephalus addt. descript. fig. of skull p. 270, H. E. ANTHONY **29**.

Phacochoerus aethiopicus delamerei in Ital. Somali skull dimensions p. 289, DE BEAUX **53**.

†*Phacochoerus congolensis* **sp. n.** Pleistocene? Belgian Congo, v. STRAELEN Bul. Acad. roy Bruxelles (5) **10** p. 364 fig.

Potamochoerus systematic review, external anatomy and skull osteology, DE BEAUX **58**.

†*Prosthennops longirostris* **sp. n.** Pliocene Oregon, THORPE Amer. J. Sci. **7** p. 393 3 figs.

Sus scrofa habits and present status in France, PIO **488**; development of the skull, ANDRES **21**; blood supply of the pupil and ciliary process of the eye, VERSARI **641**; development of thoracic duct, GRODZINSKI **225**; variations and genetics, KRONACHER **326**; hyperdactyly, DRAHN **174**.—*S. leucomystax riukiuanus* **subsp. n.** Riukiu Is. p. 11, KURODA **334**.

HIPPOPOTAMIDAE.

Hippopotamus amphibius rearing young in captivitiy, BROWN **97**; on the liver, NEUVILLE **433**; cholesterol content of blood etct., GARDNER **203**.

AGRIOCHOERIDAE (OREODONTIDAE).

Tooth-growth, tooth succession and phylogeny of Oreodonts p. 1 8 figs., LOOMIS **373**.

†*Eporeodon* revision of species with key and taxonomic notes, THORPE **624**.—*E. relictus* **sp. n.** p. 36 fig. Miocene S. Dakota, LOOMIS Bul. Amer. Mus. **51**.

†*Merychyus curtus* p. 31 figs., *M. siouxensis* p. 33 figs., *M. delicatus* p. 33 fig., *M. paniensis* p. 34 figs. Miocene of S. Dakota and Nebraska, LOOMIS Bul. Amer. Mus. **51**.

†*Merycochoerus* and *Promerycochoerus* distinctions and historical notes, THORPE **623**.

†*Merycochoerus matthewi* p. 27 figs. Miocene S. Dakota, *M. magnus* p. 28 figs. Miocene Nebraska **spp. n.**, LOOMIS Bul. Amer. Mus. **51**.

Oreonetes **gen. n.** for *Limnenetes anceps* Douglass, LOOMIS Ann. Carnegie Mus. **15** p. 370 3 pls.

†*Promerycochoerus thomsoni* p. 22 figs., *P. gregoryi* p. 23 figs., *P. pygmyus* p. 27, **spp. n.**, Miocene, S. Dakota, LOOMIS Bul. Amer. Mus. **51**.

†*Pronomotherium siouense* rediagnosed and figured p. 183, MATTHEW **400**.

†*Ticholeptus hypsodus* **sp. n.** p. 35 fig. Miocene Nebraska, LOOMIS Bul. Amer. Mus. **51**.

CAMELIDAE.

†*Alticamelus alexandrae* **sp. n.** Miocene California, DAVIDSON Univ. Cal. Publ. Geol. **14** p. 399 16 figs.—*A. priscus* **sp. n.** Miocene Nebraska, MATTHEW Bul. Amer. Mus. **50** p. 187.

†*Miolabis tenuis* **sp. n.** Miocene Nebraska, MATTHEW Bul. Amer. Mus. **50** p. 191 figs.

†*Poebrotherium andersoni* synonymy and skull p. 129 fig. 10, SINCLAIR **569**.

†*Procamelus concerptus* p. 11, *P. benedentatus* p. 12 **spp. n.** figs. U. Miocene Texas, HAY Proc. Biol. Soc. **37**.

†*Protolabis saxeus* **sp. n.** Miocene Nebraska, MATTHEW Bul. Amer. Mus. **50** p. 190.—*P. francisi* **sp. n.** U. Miocene Texas, HAY Proc. Biol. Soc. **37** p. 13 figs.

Vicugna an instance of Rodent-like incisors, G. S. MILLER **413**.

ANOPLOTHERIDAE.

†*Protodichobune oweni* definition figs. p. 75, TEILHARD **602**.

TRAGULIDAE.

†*Dyseomeryx* **subg. n.** for *Blastomeryx marshi* Lull p. 196, *B.* (*D.*) *riparius* **sp. n.** Miocene Nebraska p. 197 figs., MATTHEW Bul. Amer. Mus. **50**

CERVIDAE.

†A review of the Pliocene Cervidae, SCHLOSSER **541**.

†Fossil Deer from Tertiary of Mongolia p. 73, SCHLOSSER **542**.

Review of the recent and extinct Deer of Argentina, CASTELLANOS **122**.

Alces alces synostosis in the tarsal bones, KOS **315**.—*A. americanus* range extending further north, ANDERSON **19**.

Cervus elaphus distribution and breeding range in Norway, INGEBRIGTSEN **272**; The introduction and naturalization of the Red Deer and other Game Animals in New Zealand, DONNE **170**.—*C. sika* effects of castration, PENROSE **473**.

†*Dromomeryx texanus* p. 15, *D.*? *angustidens* **spp. n.** p. 16 figs. U. Miocene Texas, HAY Proc. Biol. Soc. **37**.

†*Eumeryx* **gen. n.** for type *E. culminis* **sp. n.** Oligocene Mongolia, MATTHEW & GRANGER Amer. Mus. Nov. no.**105** p. 3 fig. 3.

†*Moschus grandaevus* **sp. n.** Tertiary Mongolia, SCHLOSSER Palaeont. Sinica ser. C. **1** p. 89 figs.

†*Procapreolus latifrons* **sp. n.** Tertiary Mongolia, SCHLOSSER Palaeont. Sinica ser. C. **1** p. 87 figs.

Rangifer tarandus the industry and economics, SMITH **571**.

†*Rangifer tarandus* post tertiary skull from Galicia discussed, NIEZABITOWSKI **437**.

Sika nippon keramae **subsp. n.** Riukiu Is. p. 12, KURODA **334**.

GIRAFFIDAE.

†*Achtiaria expectans* from Crimea bones described and figured pp. 2, 25, BORISSIAK **87**.

Okapia johnstoni anatomy of the caecum and its ileo-caecal valve, DERSCHEID & NEUVILLE **164**.

ANTILOCAPRIDAE.

†*Blastomeryx vigoratus* **sp. n.** U. Miocene Texas, HAY Proc. Biol. Soc. **37** p. 16 figs.

†*Merycodus altidens* **sp. n.** Pliocene Nebraska and affinities of genus, MATTHEW Bul. Amer. Mus. **50** p. 200 figs.—*M. grandis* **sp. n.** U. Miocene, Texas, HAY Proc. Biol. Soc. **37** p. 17 figs.

†*Oreodontoides oregonensis* addt. description with figs., THORPE **625**.

BOVIDAE.

The Wild Sheep of the Tian Shan range, CERNAVIN **131**.

The Antelopes of Italian Somali, races discussed pp. 293–312, DE BEAUX **53**.

The Antelopes of the S. W. Afr. Protect., ZUKOWSKY **678**.

Dorsal and nuchal myology of Buffalo and Zebu, MOULIN **426**.

On the blood and the blood corpuscles of domesticated Ruminants, PETKOV **483**.

Digestion in Ruminants, CAPOBIANCO **117**.

Bison bison survival and present distr. in Canada, KITTO **307**.—*B. bonasus* its preservation and the constitution of a special society for the purpose, DE BEAUX **56**; review of history, habits, etct., in Bialovieza forest, Poland, SZTOLCMAN **599**.

Bos "*dom.*" development of the posterior portion of the skull, WILHELM **667**; *Bos taurus* ossification and other bone studies on the fore and hind limb, with Rontgen rays, KÜPFER & SCHINZ **333**; embryology, early stages to one month, KRÖLLING **325**; genetics of coat colour, CAMPBELL **115**; abnormal coronary artery, SCHAUDER **534**; hair arrangement of a double monster, NIEDOBA **436**; abnormal omasum, osteological and liver abnormalities, METTAM **406**, **407**.—*B. bonasus* its present status in Lithuania, STECHOW **582**; history in Russia, KULAGIN **331**; does it occur in Persia? LÖNNBERG **368**.

†*Bos* sp. a skull without horns and one with, in Post-tertiary of Poland, HOYER **265**.

Bubalus caffer comp. anatomy of kidney, PETIT **476**.

Capra aegagrus in the mountains of Thrace, ST. KONISLOW **526**.

†*Capra prisca* **sp. n.** Post-tertiary Galicia, ADAMETZ & NIEZABITOWSKI Bul. Intern. Acad. Krakow **1914B** p. 766 2 pls.

Cephalophus harveyi bottegoi **subsp. n.** Ital. Somali, DE BEAUX Atti soc. ital. Milano **63** p. 6.—*C. melanorheus pembae* Pemba I., E. Africa, KERSHAW Am. Mag. N. H. (9) **13** p. 556.

†*Deperetia ardea* in Pliocene beds of Senèze, France 2 figs. p. 287, SCHAUB **533**.

Gazella soemmeringi berberana characters p. 165, DE BEAUX **55**.

†*Gazella* sp. from Crimea described and figured pp. 11, 34, BORISSIAK **87**.

Limnotragus spekei wilhelmi **subsp. n.** Kigezi, Uganda, LÖNNBERG & GYLDENSTOLPE Ann. Mag. N. H. (9) **13** p. 197 fig.; addt. information, LÖNNBERG **367**.

†*Megalovis latifrons* **gen. et sp. n.** Pliocene of Senèze, France, SCHAUB Eclog. Geol. Helvet. **18** p. 292 1 fig.

Oreotragus oreotragus cunenensis p. 124, *O. o. steinhardtii* p. 127 figs. 10–12, **subspp. n.** S.W. Afr. Protect., ZUKOWSKY Arch. Natg. **90** A Hft. 1.

Ovis "*dom.*" union of skull bones, PETCOFF **481**; structure of the valves of the heart, PACE **458**; Kemp fibres in merino wool, DUERDEN & RITCHIE **179**, **180**; distinctness of races by blood-tests, BIALOSUKNIA & KACZKOWSKI **66**; genetics of Wensleydale breed, DRY **175**.

Pediotragus kelleni steinhardti p. 129, *P. k. cunenensis* p. 131, *P. k. ugabensis* p. 132 figs. 10–12, **subspp. n.**, and two other unnamed races indicated, S.W. Afr. Protect., ZUKOWSKY Arch. Natg. **90** A Hft. 1.

†*Procamptoceras brivatense* **gen.** et **sp. n.** Pliocene France, SCHAUB Eclog. Geol. Helv. **18** p. 282 2 figs.

†*Propalaeoryx austro-africanus* **gen.** et **sp. n.** Mid-tertiary S.W. Africa, STROMER Sitzb. Ak. Wiss. München **1923** p. 256.

†*Strogulognathus sansaniensis* remains allied to this form in S.W. Africa p. 255, STROMER **593.**

Sylvicapra grimmia steinhardti p. 113, *S. g. ugabensis* p. 115, *S. g. cunenensis* p. 117, *S. g. omurambae* p. 118 figs. 7–8 **subspp. n.** S. W. Afr. Protect., ZUKOWSKY Arch. Natg. **90** A Hft. 1.

†*Tragelaphus torticornis* Pliocene of Senèze, France p. 285, SCHAUB **533.**

ORDER SIRENIA.

Similarities in tooth-evolution with Proboscidea, ANDREWS **22.**

The structure of the Sirenian kidney, PETIT **480.**

TRICHECIDAE (MANATIDAE).

Manatus senegalensis lobulation of the kidney, PETIT **479.**

HALICORIDAE.

Halicore dugong distribution and habits on Madagascar coasts, PETIT **477, 478.**

†*Metaxitherium* sp. ? from Miocene Italy, CAMPANA **114.**

ORDER CETACEA.

General review of families and genera p. 196, WINGE **669.**

The male urogenetal organs, R. ANTHONY **31.**

List with key of Indo-Australian Delphinidae p. 350, DAMMERMAN **157.**

†Distribution of the Cetacea in the Cretaceous Eocene beds of Patagonia p. 272 IHERING **271.**

Whale oil and its production, GAVER **208.**

SQUALODONTIDAE.

†*Neosqualodon assenzae* descript. and fig., GEMMELLARO **211.**

Saurocetus gibbesii note on type, a tooth in Cambridge Museum with fig., G. M. ALLEN **8.**

PLATANISTERIDAE.

†*Zarhachis flagellator* full description from fresh material, Miocene of Maryland with 18 pls., KELLOGG **293.**

DELPHINIDAE.

Globicephala melaena external and internal characters, etct., RITCHIE **517**; stranded on N. Zealand coast, OLIVER **447.**—*G. indica* on examples stranded in Java, DAMMERMAN **157.**

Lagenorhynchus albirostris in Firth of Forth, RITCHIE **518.**

†*Lonchodelphis* **gen. n.** for *Delphinus occiduus* Leidy, G. M. ALLEN J. Mamm. **5** p. 194.

Orca gladiator observations on coast of Bt. Columbia, MORAN **425.**

†*Pseudorca crassidens* osteology of two examples from Cambridgeshire fens, GARROD **205.**

PHYSETERIDAE.

Mesoplodon anatomy of the male urinogenetal organs, R. ANTHONY **31.**—*M. mirus* and *M. densirostris* on the skeleton with remarks on other species and allied forms, HARMER **234.**—*M. layardi* stranded on N. Zealand coast tooth fig., OLIVER **447.**

Physeter macrocephalus venous system and blood glands of neck, BEDDARD **60.**

BALAENIDAE.

Balaenoptera borealis skeleton of an example from Florida described and figured 22 pls., G. S. MILLER **414.**

†*Balaenoptera ryani* **sp. n.** Miocene California, HANNA & MCLELLAN Proc. Cal. Acad. Sci. **13** p. 238 5 pls.

†*Parietobalaena* **gen. n.** p. 1 for *P. palmeri* **sp. n.** Miocene Maryland p. 2, KELLOGG P. U. S. N. Mus. **63** art. 15 6 pls.

Sibbaldus musculus photographs and measurements 9 pls., G. S. MILLER **412.**

ORDER EDENTATA.

The external anatomy of Edentates and a proposed classification, POCOCK **493, 494.**

Anatomy of the ear in Edentates, especially *Dasypus*, KAWANO **291**; of the female genital organs, ALTMANN **14.**

A comparison of the Mylodonts of N. and S. America p. 457, KRAGLIEVICH **317.**

BRADYPODIDAE.

Bradypus tridactylus structure of teeth, SCHMIDT **544**; temperature and metabolism, OZORIO & FIALHO **455.**

MEGALONICHIDAE.

†*Megalonyx curvidens* **sp. n.** Pliocene Nebraska, MATTHEW Bul. Amer. Mus. **50** p. 149 fig.

MEGATHERIIDAE.

†*Eumylodon incertus* **sp. n.** Tertiary of Argentina, KRAGLIEVICH An. Mus. Nac. Buenos Aires **31** p. 451 3 pls.

†*Megatherium gallardoi* full description of a skull from the Lower Pampean beds 5 pls., AMEGHINO & KRAGLIEVICH **17.**

†*Pleurolestodon acutidens*, *P. avitus* description of skeleton and discussion of phylogeny and geol. age, and review of genera of Mylodonts p. 95 3 pls., *P. myloides gallenii* **subsp. n.** Miocene ? Argentina p. 119 3 pls., KRAGLIEVICH An. Mus. Nac. Buenos Aires **31.**

DASYPODIDAE.

Tatusia novemcincta temperature and metabolism, OZORIO & FIALHO **454.**

MANIDAE.

Paramanis **gen. n.** for type *Manis javanica*, POCOCK P. Z. S. 1924 p. 722.

Uromanis **gen. n.** for type *Manis longicaudata*, POCOCK P. Z. S. **1924** p. 722.

ORYCTEROPIDAE.

Orycteropus afer external characters and anatomy, POCOCK **492.**—*O. a. somalicus* descript., measurements and races p. 312, DE BEAUX **53.**—*O. capensis* facial and jaw muscles, EDGEWORTH **183.**

ORDER MARSUPIALIA.

Anatomy of the tongue, SONNTAG **576.**

The ossicles of Paauw in the ear of Marsupials, KLAAUW **309.**

The structure and development of the nasal cavity, TSUDA **632.**

Interpleural openings and air-sacs, HARTMANN-WEINBERG **239.**

Sparassodont Marsupials of S. America closely related to *Thylacinus* and other questions of the phylogeny of Marsupials, WOOD **673.**

Origin and distribution of Australian Marsupials, LONGMAN **365.**

The Peramelidae Phalangeridae, Macropopidae, Phascolomyidae of South Australia, descriptions and anatomy, JONES **283.**

Studies on Chilean Marsupials, KRIEG **324.**

PHASCOLOMYIDAE.

†*Phascolomys magnus* incisors figured with note on taxonomy p. 20, LONGMAN **366.**

†*Phascolonus gigas* note on jaws and teeth p. 19, LONGMAN **366.**

DIPROTODONTIDAE.

†*Diprotodon australis*, *D. minor* mandibles described and figured, LONGMAN **366.**

†*Nototherium mitchelli* and *N. victoriae* on King I., the tusk and horn in female; also on a mutilated femur with fig., SCOTT & LORD **557.**

MACROPODIDAE.

Macropus fuliginosus history and anatomy and field observations, JONES **285.**

Petrogale celeris p. 273 S. W. Queensland, *P. purpureicollis* p. 274 N. W. Queensland, **spp. n.**, LE SOUEF Austral. Zool. **3.**

Propleopus **gen. n.** for *Trialis* DE VIS preocc., LONGMAN Mem. Queensl. Mus. **8** p. 20.

†*Protemnodon anak* on King I., bones described, SCOTT & LORD **557.**

CAENOLESTIDAE.

Caenolestes convelatus **sp. n.** Ecuador H. E. ANTHONY Amer. Mus. Nov. **120** p. 1.

DASYURIDAE.

Phascogale swainsoni mimetes **subsp. n.** N. S. Wales, THOMAS Ann. Mag. N. H. (9) **14** p. 528.

DIDELPHYIDAE.

Didelphys virginiana structure of cerebral cortex, GRAY **219**; the cerebral physiology, ROGERS **521**; the nucleus olfactorius anterior, HERRICK **251**; anatomy of motor cortex of brain, GRAY & TURNER; of the pyramidal tract, TURNER **220**; contractions of uterus and vagina during oestrus, HARTMAN **237**; spermatogenesis p. 197, PAINTER **460**.—*D. paraguayensis* life-history, habits, external anatomy, including pouch figs., KRIEG **323**. *D. didelphii* low temperature, weight and metabolism, GLEY & OZORIO **216**.

Marmosa elegans life-history and external characters in Chile, KRIEG **324**.—*M. rutteri* p. 536, *M. maranii* p. 537 Peruvian Amazons, **spp. n.**, THOMAS Ann. Mag. N. H. (9) **13**.—*M. perfusca* **sp. n.** Bogotá, THOMAS Ann. Mag. N. H. (9) **13** p. 236.

Metachirus crassicaudatus life-history, habits, external anatomy and structure of pouch, figs., KRIEG **323**.

Monodelphis fosteri **sp. n.** Argentina, THOMAS Ann. Mag. N. H. (9) **13** p. 586.

ORDER ALLOTHERIA.

(=PLAGIAULACOIDEA & MULTITUBERCULATA.)

Cornwallius **gen. n.** for *Desmostylus sookensis* Cornwall, HAY Pan.-Amer. Geol. **39** 1923 p. 107 fig. 4.

Desmostylus and *Cornwallius* dentition discussed, HAY **243**.

†*Desmostylus sookensis* with Sooke (? Oligocene) beds of Vancouver Island p. 177, CLARK & ARNOLD **139**.

†*Neoplagiaulax eocaenus* p. 13 figs., TEILHARD **602**.

†*Plieningeria* **nom. n.** for *Microlestes* Plieninger 1847, KRAUSSE Arch. Natg. **83** A 6 1919 p. 50.

ORDER MONOTREMATA.

Anatomy of the tongue, SONNTAG **576**.

Ornithorhynchus structure of ovum polyspermatic and double polar bodies, GATENBY & HILL **207**.

INDEX TO NAMES

OF

NEW GENERA AND SUBGENERA

INCLUDING NEW NAMES FOR GENERA PREVIOUSLY ESTABLISHED

RECORDED IN THIS VOLUME FOR 1924.

The total number of new genera enumerated in this list is 1,774 as against 1,531 in the volume for 1923. This list is made up as follows:—Protozoa 30; Porifera 47; Coelenterata 18; Echinoderma 48; Vermes 72; Mollusca 273; Brachiopoda and Bryozoa 28; Crustacea 66; Arachnida, etct. 189; Insecta 799; Prochordata 2; Pisces 79; Reptilia and Amphibia 45; Aves 22; Mammalia 56. Among the Insects Coleoptera have 223 new genera, Hymenoptera 41, Lepidoptera 115, Diptera 219, Hemiptera 69 and Orthoptera 40. The lesser Orders with 92 complete the total.

Abatoleon *Banks* Ins. 281
Abiromorphus *Pic* Ins. 173
Abranda *Iredale* Moll. 79
Acanthalictus *Cockerell* Ins. 219
Acanthallagma *Williamson & Williamson* Ins. 306
Acanthastrella *Schrammen* Por. 3
Acantholimnophila *Alexander* Ins. 248
Acantholytoceras *Spath* Moll. 84
Acantholyctus *Lesne* Ins. 138
Acanthometriotes *Hebard* Ins. 310
Acanthopharynx *Reisinger* Vermes 22
Acanthophorides *Borgmeier* Ins. 260
Achirozetes *Heller* Ins. 157
Achoanus *Munro* Ins. 262
Achrus *Lindberg* Ins. 292
Acontosceles *Champion* Ins. 137
Acrobrycon *Pearson* Pisces 30
Acrocassis *Spaeth* Ins. 178
Acrochordonoposthia *Reisinger* Vermes 22
Acrodisca *Loew* Ins. 257
Acrodrosophila *Duda* Ins. 275
Acrotomella *Woodward* Moll. 66
Acutipula *Alexander* Ins. 251
Adelobolus *Verhoeff* Arachn. 37
Adenocerca *Reisinger* Vermes 22
Adenophlebiodes *Ulmer* Ins. 304
Adenoplea *Reisinger* Vermes 22
Adiniops *Myers* Pisces 34
Aegolytoceras *Spath* Moll. 84
Aelurognathus *Haughton* Rept. 37
Aequispirella *Finlay* Moll. 43
Aethiopocassis *Spaeth* Ins. 178
Afraetus *A. Robert* Aves 56
Afrodacus *Bezzi* Ins. 271
Afrocneros *Bezzi* Ins. 271
Afrocypris *Sars* Crust. 36
Afromerveia *Roman* Ins. 232
Afronurus *Lestage* Ins. 304
Agrostichthys *Phillipps* Pisces 34
Akropapta *Wehrli* Ins. 200
Alcecoris *McAtee & Malloch* Ins. 287
Alcedoides *Laubmann* Aves 58
Algophilus *Zimmermann* Ins. 126
Allactina *Curran* Ins. 252
Allantion *Sandon* Prot. 27
Allochaeta *Borgmeier* Ins. 260
Allodermanyssus *Ewing* Arachn. 31
Allogyropus *Ewing* Ins. 300
Allomermis *Steiner* Vermes 28
Allomonhystera *Micoletzky* Vermes 29
Allopachria *Zimmermann* Ins. 127
Allopiophila *Duda* Ins. 273
Alphapachygaster *Pleske* Ins. 253
Alsopocrinus *Tansey* Echin. 23
Amblycladius *Kieffer* Ins. 240
Amblyotrypauchen *Hora* Pisces 38

Amblyphana *Wilczynski* Vermes 22
Amecephalus *Walcott* Arachn. 15
Ammostyphrus *Reichardt* Ins. 132
Amorphothrips *Bagnall* Ins. 298
Ampelophilus *Hebard* Ins. 313
Amphibodella *Findenegg* Vermes 22
Amphichondrium *Schrammen* Por. 3
Amphicticeps *Matthew & Granger* Mam. 41
Amphidotermes *Sjöstedt* Ins. 301
Amphistomium *Schrammen* Por. 3
Amphitropis *Pascher* Prot. 28
Amphorometra *Gislén* Echin. 23
Amplihuechys *Haupt* Ins. 288
Anacanthobatis *Bonde & Swart* Pisces 27
Anamesocrinus *Goldring* Echin. 23
Anameson *Mordvilko* Ins. 295
Anamphidora *Casey* Ins. 152
Anarchias *Jordan & Seale* Pisces 33
Anarytropteris *Uvarov* Ins. 311
Anastrangalia *Casey* Ins. 169
Ancistrotellus *Roewer* Arachn. 27
Andevocassis *Spaeth* Ins. 178
Andinia *Polinski* Moll. 66
Andogyrus *Ochs* Ins. 127
Andresia *Prenant* Vermes 34
Andrewsarchus *Osborn* Mam. 41
Anentmetus *Andrewes* Ins. 122
Anepholcia *Prout & Talbot* Ins. 193
Angulitermes *Sjöstedt* Ins. 302
Anibontes *R. V. Chamberlin* Arachn. 21
Anisancylus *Pilsbry* Moll. 61
Anisolobus *Vincent* Prot. 25
Anna *Amalitzky* Rept. 37
Anogmoidea *Girault* Ins. 231
Anomalocranchia *Robson* Moll. 84
Anommatoptera *Vignon* Ins. 311
Anomopera *Hartmeyer* Proch. 4
Anoplorhynchus *Meixner* Vermes 22
Anoria *Walcott* Arachn. 15
Anthoblastus *Wanner* Echin. 30
Antillocaprina *Trechmann* Moll. 82
Antioxenus *Jordan* Ins. 165
Anugana *Strand* Ins. 193
Anurognathus *Böderlein* Rept. 34
Anurotropus *Cushman* Ins. 232
Apatelia *Stein* Ins. 264
Aphanascus *Stephenson* Vermes 36
Aphanodomus *Wilson* Crust. 32
Aphantotropis *Uvarov* Ins. 313
Aphthonaltica *Heikertinger* Ins. 175
Aphyosemion *Myers* Pisces 34
Aplorhinus *Masi* Ins. 229
Apocheiridium *J. C. Chamberlin* Arachn. 25
Apocryptornis *Chapman* Aves 61
Apodrassodes *Vellard* Arachn. 19
Apospasma *Enderlein* Ins. 252
Apoxestia *Draudt* Ins. 193
Appendicia *Stein* Ins. 264
Arachnocampa *Edwards* Ins. 238
Arachnoleter *Cushman* Ins. 232
Archaegryllodes *Haughton* Ins. 310
Archaeolothrips *Bagnall* Ins. 298
Archaeothrips *Priesner* Ins. 298
Archankothrips *Priesner* Ins. 298
Archarthropterus *Kolbe* Ins. 126
Archeometra *Gislén* Echin. 23
Archimyza *Enderlein* Ins. 252
Archisolva *Enderlein* Ins. 252
Archivortex *Reisinger* Vermes 22
Arcticoceras *Spath* Moll. 84
Arctopiophila *Duda* Ins. 273
Areotrachelus *Wilson* Crust. 32
Argentiniceras *Spath* Moll. 84
Argyrogena *Werner* Rept. 33
Armenoceras *Foerste* Moll. 84
Armonia *Walcott* Arachn. 15
Arrowella *Brèthes* Ins. 135
Artamella *Sclater* Aves 68
Arthromysis *Colosi* Crust. 24
Asaphoceras *Spath* Moll. 85
Asarcopus *Horváth* Ins. 290
Ascoleucetta *Dendy & Frederick* Por. 2
Ascophora *Findenegg* Vermes 22
Assamiella *Roewer* Arachn. 26
Assmutherium *Schmitz* Ins. 261
Astelena *Iredale* Moll. 43
Asthenohymen *Tillyard* Ins. 237
Asthenopodes *Ulmer* Ins. 304
Astrolemma *Schrammen* Por. 4
Athereva *Kröber* Ins. 255
Athlostola *Meyrick* Ins. 212
Attemsobolus *Verhoeff* Arachn. 37
Atyscaphander *Annandale & Prashad* Moll. 60
Aulacoporus *Verhoeff* Arachn. 37
Aulacosphinctoides *Spath* Moll. 85
Aulanota *Moser* Ins. 148
Aulosoma *Schrammen* Por. 4
Aurotipula *Alexander* Ins. 250
Australogomys *Stromer* Mam. 48
Austrectopsis *Lea* Ins. 158
Austrobalea *Pilsbry* Moll. 67
Austrosciara *Schmitz & Mjöberg* Ins. 238
Austrostrongylus *Chandler* Vermes 29
Austrotoma *Finlay* Moll. 57
Autolichas *Reed* Arachn. 16
Autotropis *Jordan* Ins. 165
Auxanommatidia *Borgmeier* Ins. 261
Avocettinops *Roule & Berlin* Pisces 33
Axyrostola *Meyrick* Ins. 212

Babaultia *Hustache* Ins. 158
Bactropota *Bezzi* Ins. 271
Bahaia *Dyar* Ins. 200
Baicalinella *Martynov* Ins. 279
Baicalodes *Martynov* Ins. 279
Balanotaenia *Johnston* Vermes 25

Baleopsina *Lindholm* Moll. 67
Ballastraea *Iredale* Moll. 43
Bananella *Schmidt* Ins. 289
Banksiola *Martynov* Ins. 279
Banya *Navás* Ins. 281
Barbaxona *Viets* Arachn. 33
Barbourina *Amaral* Rept. 33
Barbourula *Noble* Rept. 40
Barytellina *Marwick* Moll. 79
Baso *Roewer* Arachn. 25
Bassamia *Spaeth* Ins. 178
Bathybatrachus *Gilchrist & Bonde* Pisces 40
Bathycardita *Iredale* Moll. 76
Bathyergoides *Stromer* Mam. 47
Bauseia *Kieffer* Ins. 241
Bebaiotes *Muir* Ins. 289
Bedeva *Iredale* Moll. 55
Bellefontia *Walcott* Arachn. 15
Belloliva *Peile* Moll. 58
Belonisculus *Roewer* Arachn. 25
Bembradium *Gilbert* Pisces 39
Bendisodes *Hampson* Ins. 193
Berylsma *Iredale* Moll. 54
Betheliella *Cockerell* Ins. 220
Betiscoides *Sjöstedt* Ins. 314
Beyrichoceratoides *Bisat* Moll. 85
Bicalcar *Lindner* Ins. 255
Birulana *Lindholm* Moll. 63
Bittinella *Dall* Moll. 47
Blanfordiceras *Spath* Moll. 85
Bockia *Reisinger* Vermes 22
Borgmeierella *Enderlein* Ins. 261
Borisia *Rohdendorf* Ins. 264
Borissiakoceras *Arkhanguelski* Moll. 85
Borneopoeus *Verhoeff* Arachn. 37
Borniola *Iredale* Moll. 76
Borophaga *Enderlein* Ins. 261
Botellus *Iredale* Moll. 45
Bothriospila *Aurivillius* Ins. 167
Bothrobelum *Verhoeff* Arachn. 37
Boucaulticeras *Spath* Moll. 85
Bourguyia *Mello-Leitao* Arachn. 27
Bovillina *Dall* Moll. 45
Bracanastrepha *Brèthes* Ins. 235
Brachyaciura *Bezzi* Ins. 271
Brachycallimerus *Chapin* Ins. 138
Brachycephaloptera *Borgmeier* Ins. 261
Brachyhomonoea *Aurivillius* Ins. 169
Bradycypris *Sars* Crust. 36
Bristoweia *Mello-Leitao* Arachn. 27
Brochopeltis *Verhoeff* Arachn. 38
Bucephaloptera *Ebner* Ins. 311
Buissonia *Nevew-Lemaire* Vermes 29
Bunochalis *Roewer* Arachn. 28
Buonapartea *Girault* Ins. 231
Buprestodes *Carter* Ins. 143
Burnetia *Walcott* Arachn. 15
Burnilia *Muir & Giffard* Ins. 289
Bynumia *Walcott* Arach. 15
Caconema *Cobb* Vermes 29
Cacozelia *Iredale* Moll. 47
Caenoneura *Kröber* Ins. 255
Caerulornis *Laubmann* Aves 58
Cainodactylus *Barbour* Rept. 30
Cairnsicis *Lea* Ins. 158
Calcariclavis *Lindholm* Moll. 67
Calliptychoceras *Spath* Moll. 85
Callizoniceras *Spath* Moll. 85
Calloceratina *Cockerell* Ins. 221
Calodiasthetus *Heller* Ins. 159
Calophylaitis *Heller* Ins. 158
Campella *Wilson* Crust. 32
Campopera *Schellenberg* Crust. 33
Camposicola *Mello-Leitao* Arachn. 27
Camposiella *Hebard* Ins. 311
Camptophyllia *Gill* Crust. 20
Cancellocarabus *Lutschnik* Ins. 123
Capillospirura *Skrjabin* Vermes 29
Capnella *Claassen* Ins. 303
Capulella *Dall* Moll. 50
Carabulus *Lutshnik* Ins. 123
Cardacopsis *Karny* Ins. 309
Carelozoon *Metzger* Coel. 17
Carilephia *Schaus* Ins. 191
Carinacca *Marwick* Moll. 50
Carinapex *Dall* Moll. 57
Carria *Schmiedeknecht* Ins. 233
Carsina *Hampson* Ins. 194
Caspiophaedusa *Lindholm* Moll. 67
Catactocrinus *Goldring* Echin. 24
Caulocephalus *Bhatia & Setna* Prot. 25
Caviceps *Malloch* Ins. 274
Ceballum *Fracker & Bruner* Ins. 286
Cedaria *Walcott* Arachn. 15
Cenarchis *Meyrick* Ins. 212
Centhonectes *Chappuis* Crust. 33
Centrolophodes *Gilchrist & Bonde* Pisces 37
Ceonura *Alexander* Ins. 251
Cephalakompsus *Herre* Pisces 31
Ceratobunoides *Roewer* Arachn. 28
Ceratohister *Reichensperger* Ins. 132
Ceratonyssus *Ewing* Arachn. 31
Ceratophygadeuon *Viereck* Ins. 233
Cercinthinus *Kiritshenko* Ins. 284
Cereobullia *Melvill & Peile* Moll. 55
Ceritoturris *Dall* Moll. 48
Ceyloniella *Wilson* Crust. 32
Chaetostichia *Enderlein* Ins. 269
Chalicomys *Schlosser* Mam. 45
Chalubinskia *Woloszynska* Prot. 29
Chancia *Walcott* Arachn. 15
Charientocrinus *Goldring* Echin. 24
Charmasseiceras *Spath* Moll. 85
Chasmatosaurus *Haughton* Rept. 36
Cheilister *Reichensperger* Ins. 132
Cheilobus *Cobb* Vermes 29
Cheirobelus *Whitehouse* Moll. 85
Chiasmella *Bezzi* Ins. 257

Chiloschiza *Moser* Ins. 148
Chilotherium *Ringström* Mam. 50
Chinestella *R. V. Chamberlin* Arachn. 22
Chioneryx *Iredale* Moll. 80
Chiridopsis *Spaeth* Ins. 178
Chloroniella *Esben-Petersen* Ins. 281
Chlorotalpa *Roberts* Mam. 41
Chlorotipula *Alexander* Ins. 250
Chondriophyllum *Schrammen* Por. 4
Chonothrips *John* Ins. 300
Chorizogynopora *Reisinger* Vermes 22
Chrionema *Gilbert* Pisces 37
Chrysapace *Crawley* Ins. 226
Chrysomelopsis *Achard* Ins. 173
Chylizosoma *Hendel* Ins. 268
Cinacium *Kishida* Ins. 295
Cinetidomyxa *Chatton & Lwoff* Prot. 21
Cionodendron *Benson & Smith* Coel. 12
Cistapion *Wagner* Ins. 158
Citharoceps *R. V. Chamberlin* Arachn. 19
Cladodermia *Schrammen* Por. 4
Cladodisca *Loew* Ins. 257
Clarkeocrinus *Goldring* Echin. 24
Clastopteromyia *Malloch & McAtee* Ins. 275
Clausenia *Ishii* Ins. 230
Clavarizona *Hull* Moll. 40
Clavimyia *Lindner* Ins. 252
Cleistogamia *Faust* Vermes 24
Cleolophus *Mercet* Ins. 231
Clistopsocus *Navás* Ins. 301
Clupeacharax *Pearson* Pisces 30
Coclocoenia *Gerth* Coel. 12
Coelogynopora *Steinböck* Vermes 22
Coelophyllum *Schrammen* Por. 4
Coelotrypes *Bezzi* Ins. 272
Coenaculum *Iredale* Moll. 53
Coenosopsia *Malloch* Ins. 267
Coenothrips *Bagnall* Ins. 298
Collinina *Chatton & Pérard* Prot. 30
Colobocrossa *Meyrick*, Ins. 212
Colombiceras *Spath* Moll. 86
Colonanthes *Meyrick* Ins. 212
Columbinia *Polinski* Moll. 67
Comantenna *Wilson* Crust. 32
Comitileda *Iredale* Moll. 70
Commotrias *Meyrick*, Ins. 212
Concurtisella *Roman* Ins. 235
Conometra *Gislén* Echin. 24
Conosiphon *Becker* Ins. 257
Coomaniella *Bourgoin* Ins. 143
Coomanius *Fleutiaux* Ins. 141
Coprophanaeus *d'Olsoufieff* Ins. 147
Coptoclerus *Chapin* Ins. 139
Corbinia *Walcott* Arachn. 15
Cordylosoma *Becker* Ins. 274
Coremagnatha *Hampson* Ins. 194
Corematocrinus *Goldring* Echin. 25
Cornwallius *Hay* Mam. 56
Corocrinus *Goldring* Echin. 25
Coryphagrion *Morton* Ins. 306
Cosmetalepas *Iredale* Moll. 42
Cosmocercella *Steiner* Vermes 29
Cosmolytoceras *Spath* Moll. 86
Cosmophyllum *Vollbrecht* Coel. 12
Cotyloscia *Meyrick*, Ins. 212
Cracinopria *Fouts* Ins. 229
Cradeocrinus *Goldring* Echin. 25
Crasimorpha *Meyrick*, Ins. 212
Craterites *Heron-Allen & Earland* Prot. 22
Craterocrinus *Goldring* Echin. 25
Cratoselache *Woodward* Pisces 26
Crellomyxilla *Dendy* Por. 4
Creniclavis *Lindholm* Moll. 67
Crespinia *Kieffer* Ins. 241
Crosseola *Iredale* Moll. 53
Crossobela *Meyrick* Ins. 212
Crusola *Walcott* Arachn. 15
Cryptodesma *Schrammen* Por. 4
Cryptomella *Finlay* Moll. 57
Cryptomitra *Dall* Moll. 57
Cryptothelion *Schrammen* Por. 4
Ctenocallis *Klodnitzki* Ins. 295
Ctenostichus *Enderlein* Ins. 261
Cultrozetes *Sellnick* Arachn. 30
Cumeres, *Andrewes* Ins. 121
Cupidoliva *Iredale* Moll. 58
Currania *Viereck* Ins. 233
Curtoscirtes *Pic* Ins. 134
Cyanispida *Laubmann* Aves 58
Cylicobrachytus *Cram* Vermes 29
Cylicotoichus *Cram* Vermes 29
Cylindroplocia *Heller* Ins. 170
Cylindrosella *Barber* Ins. 131
Cyliosomella *Verhoeff* Arachn. 38
Cymatiella *Iredale* Moll. 52
Cynomyiomima *Rohdendorf* Ins. 264
Cynortellana *Roewer* Arachn. 26
Cypelometra *Gislén* Echin. 25
Cyphometopis *Borgmeier* Ins. 261
Cyprilla *Sars* Crust. 36
Cyrtella *Frédérics* Brach. 12
Cyrtinoclerus *Chapin* Ins. 139
Cyttomimus *Gilbert* Pisces 35

Dasypops *Miranda-Ribeiro* Rept. 39
Dautzenbergiella *Lindholm* Moll. 67
Deiradognathoides *Hustache* Ins. 159
Dejuna *Navás* Ins. 282
Deloplotela *Hulstaert* Ins. 191
Delosia *Bolívar* Ins. 309
Delphastobia *Casey* Ins. 135
Delphastopsis *Casey* Ins. 136
Deltastoma *Malloch* Ins. 274
Deltobathra *Meyrick* Ins. 210
Dendroscirtus *Bergroth* Ins. 287
Denticularia *Lindholm* Moll. 67
Depressariodes *Turati* Ins. 213

Desmogrammella *Achard* Ins. 174
Devylderia *Sjöstedt* Ins. 314
Dhosaites *Spath* Moll. 86
Diadesmola *Hulstaert* Ins. 191
Diarthropus *Brady* Crust. 33
Diathoneura *Duda* Ins. 275
Dicheloschema *Moser* Ins. 148
Dichromyotis *Bianchi* Mam. 39
Dichrostoptera *Hulstaert* Ins. 191
Dicladosomus *Verhoeff* Arachn. 37
Dicranoclista *Bezzi* Ins. 257
Dictenophiura *Clark* Echin. 21
Didontoglossa *Annandale* Moll. 60
Didymoconus *Matthew & Granger* Mam. 41
Diffusilina *Heron-Allen & Earland* Prot. 23
Dilinium *Casey* Ins. 131
Dimitobelus *Whitehouse* Moll. 86
Dinephrius *Jordan* Ins. 166
Dinochora *Meyrick* Ins. 213
Diphleps *Bergroth* Ins. 287
Diptilomiopus *Nalepa* Arachn. 35
Diradias *Jordan* Pisces 29
Discometra *Gislén* Echin. 25
Discorhabdella *Dendy* Por. 4
Disepholcia *Prout & Talbot* Ins. 195
Distichopis *Bolivar* Ins. 309
Ditrichophora *Cresson* Ins. 275
Dixapuella *Dyar & Shannon* Ins. 247
Dixella *Dyar & Shannon* Ins. 247
Dokimocephalus *Walcott* Arachn. 16
Dolichomastix *Ceballos* Ins. 233
Dolichosomastis *Hampson* Ins. 195
Dolicrossea *Iredale* Moll. 53
Doliomyia *Johannsen* Ins. 274
Dollocaris *v. Straelen* Crust. 24
Dorcaschesis *Heller* Ins. 170
Dotonella *Dendy* Por. 4
Drombus *Jordan & Seale* Pisces 38
Drosophilella *Duda* Ins. 276
Drybrookia *Bolton* Ins. 309
Dunbaria *Tillyard* Ins. 305
Dunderbergia *Walcott* Arachn. 16
Duomitella *Kozhantshikov* Ins. 205
Duralimnesia *Viets* Arachn. 34
Dusmetiola *Tavares* Ins. 232
Dvinosaurus *Amalitzky* Rept. 41
Dwightia *Wilson* Crust. 32
Dyoplosaurus *Parks* Rept. 35
Dyscocyrtoides *Mello-Leitao* Arachn. 27
Dyseomeryx *Matthew* Mam. 52
Dysimia *Muir* Ins. 290

Eatonioides *McLearn* Brach. 9
Eberhardia *Oudemans* Arachn. 36
Ebertia *Oudemans* Arachn. 36
Ecildaus *Lea* Ins. 159
Ecitocantha *Borgmeier* Ins. 261
Ectrichodiella *Fracker & Bruner* Ins. 286
Egumbia *Bethune-Baker* Ins. 187
Eicochrysops *Bethune-Baker* Ins. 187
Electrapion *Wagner* Ins. 158
Electrothrips *Bagnall* Ins. 298
Elegidion *Iredale* Moll. 42
Elina *Frédérics* Brach. 11
Eliva *Frédérics* Brach. 11
Elivina *Frédérics* Brach. 11
Elkia *Walcott* Arachn. 16
Ella *Frédérics* Brach. 11
Elrathia *Walcott* Arachn. 16
Elvinia *Walcott* Arachn. 16
Elytha *Frédérics* Brach. 11
Embolocarus *Sellnick* Arachn. 30
Eminophis *Werner* Rept. 34
Emmyia *Klöcker* Ins. 262
Encycloceras *Spath* Moll. 86
Encyclometra *Baylis & Cannon* Vermes 24
Enderleinia *Cushman* Ins. 233
Entonyssus *Ewing* Arachn. 31
Eobalanus *Ruedemann* Crust. 38
Eocatops *de Peyerimhoff* Ins. 131
Eocephalothrips *Bagnall* Ins. 298
Eoceratops *Lambe* Rept. 35
Eodesmoceras *Spath* Moll. 86
Eomyza *Cockerell* Ins. 277
Eopaectes *Hulstaert* Ins. 195
Eparietites *Spath* Moll. 86
Epengonoceras *Spath* Moll. 87
Ephemerellina *Lestage* Ins. 305
Epheriella *Pallary* Moll. 45
Ephydroscinis *Malloch* Ins. 274
Epicephalius *Matsumura* Ins. 293
Epimecyntis *Meyrick* Ins. 213
Epipeltoceras *Spath* Moll. 89
Epivirgatites *Spath* Moll. 92
Epophioceras *Spath* Moll. 87
Erbolaspis *Spaeth* Ins. 178
Eremitalpa *Roberts* Mam. 41
Eremophanes *Banks* Ins. 282
Eremophlepsius *Zachvatkin* Ins. 293
Erimonax *Jordan* Pisces 31
Eriquius *Jordan* Pisces 36
Ernestopehlkia *Schmidt* Ins. 291
Erythrochampsa *Haughton* Rept. 35
Esbenophlebia *Lestage* Ins. 305
Ethminolia *Iredale* Moll. 43
Euarthropterus *Kolbe* Ins. 126
Eubalta *Roewer* Arachn. 27
Euceratobunus *Roewer* Arachn. 28
Euchaetopsis *Brady* Crust. 34
Eucrassatella *Iredale* Moll. 77
Eudinoceras *Osborn* Mam. 49
Eufaustia *Lea* Ins. 160
Euglenamorpha *Wenrich* Prot. 28
Eugyndes *Roewer* Arachn. 27
Euharpalops *Casey* Ins. 124

Eulepyronia *Schmidt* Ins. 291
Eumaenas *Hampson* Ins. 195
Eumarcia *Iredale* Moll. 80
Eumecasis *Enderlein* Ins. 253
Eumeryx *Matthew & Granger* Mam. 52
Eunebristis *Meyrick* Ins. 213
Eunomarcha *Meyrick* Ins. 213
Euoplocyon *Matthew* Mam. 42
Eupodoctis *Roewer* Arachn. 25
Eurekia *Walcott* Arachn. 16
Euryleptides *Palombi* Vermes 23
Euryzonia *Laubmann* Aves 58
Euscaphidium *Achard* Ins. 131
Euselenca *Roewer* Arachn. 26
Eushelfordia *Hebard* Ins. 309
Euspira *Marwick* Moll. 51
Eustilodes *Achard* Ins. 174
Eutetracera *Brèthes* Ins. 230
Eutricholistra *Blaisdell* Ins. 139
Eutrinita *Hampson* Ins. 195
Eutriorophus *Casey* Ins. 153
Euwintonius *Roewer* Arachn. 26
Euxinolauria *Lindholm* Moll. 67
Exaeretina *Enderlein* Ins. 253
Exeristoidea *Viereck* Ins. 233
Eximiothracia *Iredale* Moll. 83
Exithioides *Lea* Ins. 160
Exmacrocyrtus *Schultze* Ins. 161
Exnothapocyrtus *Schultze* Ins. 160
Exyrias, *Jordan & Seale* Pisces 38

Fakoa, *Roewer* Arachn. 26
Falsodiopethes *Pic* Ins. 153
Falsonandra *Pic* Ins. 170
Falsopedilus *Pic* Ins. 155
Fantor *Iredale* Moll. 44
Farreopsis *Schrammen* Por. 3
Fastigitermes *Sjöstedt* Ins. 302
Fenestepora *Frédériks* Bry. 18
Fergusonina *Malloch* Ins. 277
Fessoniella *Hirst* Arachn. 32
Fissistomella *Clodius* Prot. 23
Fleuria, *Kieffer* Ins. 241
Fluella *Dall* Moll. 55
Flugtiger *Iredale* Moll. 80
Fluviogammarus *Dorogostajskij* Crust. 28
Fluviolanatus *Iredale* Moll. 72
Foa *Jordan & Evermann* Pisces 35
Forcellinia *Oudemans* Arachn. 36
Forquilla *Navás* Ins. 304
Fournieria *Kieffer* Ins. 242
Francilia *Shannon* Ins. 265
Fritzrühlia *Schmidt* Ins. 290
Fruticoconus *Mollendorff* Moll. 64
Fuhrmannella *Baer* Vermes 26
Fundulopanchax *Myers* Pisces 34
Fundulosoma *Ahl* Pisces 33
Fungophyllia *Gerth* Coel. 14
Fuscuropoda *Vitzthum* Arachn. 31

Galapagomyia *Johnson* Ins. 242
Galfridus *Iredale* Moll. 52
Gallardoia *Bruck* Ins. 129
Galloisia *Caudell & King* Ins. 308
Galloisiana *Caudell* Ins. 308
Gangesia *Woodland* Vermes 26
Garnierciceras *Spath* Moll. 86
Gasatomus *R. V. Chamberlin* Arachn. 38
Gazameda *Iredale* Moll. 49
Gelasinophorus *Schrammen* Por. 5
Gemma *Hazay* Moll. 63
Gemmoliva *Iredale* Moll. 58
Gigantaster *Döderlein* Echin. 19
Gigantodesma *Schrammen* Por. 5
Gillotiella *Kieffer* Ins. 238
Girvania *Longstaff* Moll. 59
Gitolampopsis *Checchia-Rispoli* Echin. 16
Glaphyronyx *Moser* Ins. 148
Glaucodes *Pruvost* Arachn. 17
Glaucops *Szilady* Ins. 254
Glenodiniopsis *Woloszynska* Prot. 29
Globisinum *Marwick* Moll. 50
Glochinodontoides *Haughton* Rept. 37
Gloduria *Dyar* Ins. 201
Glossocrinus *Goldring* Echin. 26
Glyptoporopterus *Lea* Ins. 160
Glyptozaria *Iredale* Moll. 49
Gnathoniella *Schmiedeknecht* Ins. 233
Gomphocythere *Sars* Crust. 37
Gonarthrus *Bezzi* Ins. 258
Gonempeda *Alexander* Ins. 249
Gonoglasa *Hampson* Ins. 195
Gorgasia *Meek & Hildebrand* Pisces 33
Gouldiopa *Iredale* Moll. 80
Gracilinenia *Polinski* Moll. 67
Gracillina *Hampson* Ins. 195
Gradidorsum *Sellnick* Arachn. 30
Graecophalangium *Roewer* Arachn. 29
Grayiceras *Spath* Moll. 87
Grammatonotus *Gilbert* Pisces 35
Grammodesma *Achard* Ins. 174
Grammomades *Achard* Ins. 174
Graphomoa *R. V. Chamberlin* Arachn. 21
Gregoryceras *Spath* Moll. 89
Gregoryina *Fowler & Ball* Pisces 36
Griphodon *H. E. Anthony* Mam. 50
Guilielmia *Wiese* Ins. 176
Gyarilla *Schmidt* Ins. 291
Gymnoporopterus *Lea* Ins. 160
Gyrinella *Dall* Moll. 52
Gyrocochlea *Hedley* Moll. 66
Gyrophioceras *Spath* Moll. 87

Haargneria *A. Roberts* Aves 70
Hagenella *Martynov* Ins. 279
Hallocrinus *Goldring* Echin. 26
Halterorchis *Bezzi* Ins. 256
Hamulofilaria *Chandler* Vermes 30
Hantkenina *Cushman* Prot. 23
Haphospatha *Enderlein* Ins. 267

Haplochela *Meyrick* Ins. 214
Haplomydas *Bezzi* Ins. 256
Haplosaccus *Chatton & Harant* Crust. 34
Haplostomella *Chatton & Harant* Crust. 34
Haplostomides *Chatton & Harant* Crust. 34
Haplovortex *Reisinger* Vermes 23
Hardyia *Walcott* Arachn. 16
Harpagopalpus *Viets* Arachn. 34
Hebardiella *Werner* Ins. 310
Hecticoceratoides *Spath* Moll. 87
Hedroxena *Meyrick* Ins. 214
Hegneria *Brumpt & Lavier* Prot. 28
Heliconatica *Dall* Moll. 50
Helicopodosoma *Verhoeff* Arachn. 38
Helicopodosomella *Verhoeff* Arachn. 38
Helocnemia *Enderlein* Ins. 270
Hemiberis *Enderlein* Ins. 253
Hemiodoecus *China* Ins. 288
Hemimegacis *Enderlein* Ins. 253
Hemiscaphium *Achard* Ins. 132
Henryella *Neveu-Lemaire* Vermes 30
Heoeugorna *Hampson* Ins. 196
Heptaphyllum *Clark* Coel. 14
Heringia *Almeida* Ins. 182
Hermannioewia *Bezzi* Ins. 272
Hesperochernes *J. C. Chamberlin* Arachn. 25
Heterodiomus *Brèthes* Ins. 136
Heterogyropus *Ewing* Ins. 300
Heterolimnophila *Alexander* Ins. 249
Heteropygoplus *Roewer* Arachn. 26
Heterostigma *Ärmback-Christie-Linde* Proch. 4
Heterostilbus *Champion* Ins. 137
Heterothelion *Schrammen* Por. 5
Heudiella *Annandale* Moll. 67
Hildoglochiceras *Spath* Moll. 87
Hime *Starks* Pisces 32
Hippopodinella *Barroso* Bry. 19
Hirtodrosophila *Duda* Ins. 275
Histrionella *Achard* Ins. 174
Hito *Herre* Pisces 32
Holcocarcinus *Withers* Crust. 21
Holcolytoceras *Spath* Moll. 87
Holcostephanoides *Spath* Moll. 92
Hololeptoblatta *Bolivar* Ins. 309
Holopone *Santschi* Ins. 226
Holtedahlia *Kieffer* Ins. 242
Holteria *Walcott* Arachn. 16
Homoceratoides *Bisat* Moll. 87
Homocypris *Sars* Crust. 37
Homoeopteryx *Jordan* Ins. 204
Hoplodecilaus *Lea* Ins. 160
Hoplopera *Reisinger* Vermes 23
Hoplophoropyga *Chopard* Ins. 309
Hoploplatystoma *Enderlein* Ins. 270
Hoppingiana *Blaisdell* Ins. 139
Horistomyia *Alexander* Ins. 249
Horodromus *R. V. Chamberlin* Arachn. 23
Huroniella *Foerste* Moll. 88
Huttia *Myers* Ins. 289
Huttonella *Enderlein* Ins. 253
Hyalodia *Jordan* Ins. 185
Hyalorhynchus *Gilchrist & Bonde* Pisces 29
Hydrobiosella *Tillyard* Ins. 279
Hydrochorema *Tillyard* Ins. 279
Hygrobatopsis *Viets* Arachn. 34
Hylagama *Mertens* Rept. 31
Hylomus *Cook & Loomis* Arachn. 38
Hylorops *Enderlein* Ins. 253
Hynnodus *Gilbert* Pisces 35
Hypacanthoplites *Spath* Moll. 88
Hyperoedesipus *Nicholls & Milner* Crust. 25
Hyperusia *Bezzi* Ins. 258
Hypnoticus *Wilson* Crust. 32
Hypocomella *Chatton & Lwoff* Prot. 31
Hypocomina *Chatton & Lwoff* Prot. 31
Hypogastrion *Wilson* Crust. 32
Hypopheltes *Cushman* Ins. 233
Hyposcaphidium *Achard* Ins. 132
Hypsopanchax *Myers* Pisces 34
Hystricothripoides *Fulmek* Ins. 298

Ibalonianus *Roewer* Arachn. 25
Ibaloniellus *Roewer* Arachn. 25
Ibalonicides *Roewer* Arachn. 25
Ibicicornu *Dall* Moll. 46
Icania *Poliński* Moll. 67
Icuncula *Iredale* Moll. 53
Idahola *Walcott* Arachn. 16
Iddingsia *Walcott* Arachn. 16
Idiorthis *McLearn* Brach. 7
Idylopsina *Lindholm* Moll. 67
Illidgea *Lea* Ins. 160
Illiothrix *Enderlein* Ins. 270
Illunellaria *Lindholm* Moll. 67
Ima *Tindale* Ins. 310
Incilicornu *Dall* Moll. 46
Incisurifrons *Malloch* Ins. 275
Indracotherium *Borisiak* Mam. 50
Inglisella *Finlay* Moll. 54
Inobseratella *Lindholm* Moll. 68
Inostranzevia *Amalitzky* Rept. 37
Iophonopsis *Dendy* Por. 5
Iphinopsis *Dall* Moll. 52
Ipocoelius *Ruschka* Ins. 231
Irvingella *Walcott* Arachn. 16
Isarachnactis *Carlgren* Coel. 14
Isoceras *Turati* Ins. 205
Isocnemus *Bezzi* Ins. 258
Isoleda *Rollier* Moll. 70
Isoscaphidium *Achard* Ins. 132
Iteacrinus *Goldring* Echin. 26
Ixias *Deville* Ins. 158
Ixodorhynchus *Ewing* Arachn. 31

Jacobyanella *Laboissière* Ins. 177
Jaekelometra *Gislén* Echin. 26
Janiodes *Jordan* Ins. 204
Johannella *Monod* Crust. 25
Jordanicus *Gilbert* Pisces 39
Jorgensenia *Schaus* Ins. 191
Juddiceras *Spath* Moll. 88

Kachpurites *Spath* Moll. 86
Kamaka *Dershavin* Crust. 28
Kammerkarites *Spath* Moll. 88
Kanduka *Hora* Pisces 40
Karyamoeba *Kofoid & Swezy* Prot. 22
Katroliceras *Spath* Moll. 88
Kaznakoviella *Lindholm* Moll. 65
Kelloggella *Jordan & Evermann* Pisces 38
Kempiella *Chopard* Ins. 311
Khalilia *Neveu-Lemaire* Vermes 30
Kheraiceras *Spath* Moll. 88
Kibramoa *R. V. Chamberlin* Arachn. 19
Kilianicaris *v. Straelen* Crust. 24
Kingstonia *Walcott* Arachn. 16
Kirongoziella *Schmidt* Ins. 290
Koilopleura, *Trask* Moll. 54
Koinocystis *Meixner* Vermes 23
Kolomania *Pleske* Ins. 253
Konemys *de Beaux* Mam. 46
Koroana *Myers* Ins. 289
Kotlassia *Amalitzky* Rept. 38
Kronosaurus *Longman* Rept. 37
Krumbachia *Reisinger* Vermes 23
Kuesteriella *Lindholm* Moll. 68
Kurisakia *Takahashi* Ins. 295

Lachnesthus *Bergroth* Ins. 285
Lagocrinus *Goldring* Echin. 27
Lamellogomphus *Fraser* Ins. 307
Lamprophyllum *Hebard* Ins. 312
Langfordia *Dall* Moll. 55
Larandopsis *Chopard* Ins. 311
Larinomesius *Reitter* Ins. 161
Larinorhynchus *Reitter* Ins. 161
Lasiopiophila *Duda* Ins. 273
Latigena *Stein* Ins. 265
Leiohyphe *Schrammen* Por. 5
Leiophyllum *Schrammen* Por. 5
Lekanophyllum *Wedekind* Coel. 14
Lendomus *Casey* Ins. 138
Lenophyllum *Wedekind* Coel. 14
Lepidastheniella *Monro* Vermes 35
Lepidocompsia *Enderlein* Ins. 270
Lepidophthalmus *Fage* Crust. 24
Lepidoribates *Sellnick* Arachn. 30
Lepidospongia *Dendy* Por. 5
Lepidostethaspis *Arrow* Ins. 149
Lepidotermes *Sjöstedt* Ins. 302
Leptepania *Heller* Ins. 168
Leptochauliodes *Esben-Petersen* Ins. 282
Leptolabia *Enderlein* Ins. 270
Leptolucania *Myers* Pisces 34
Leptorhynchoides *Kostylev* Vermes 30
Leptostomias *Gilbert* Pisces 30
Leptozestis *Meyrick* Ins. 214
Lepyroniella *Schmidt* Ins. 291
Lequerrea *Chatton & Harant* Crust. 35
Lestidium *Gilbert* Pisces 32
Leuritus *R. V. Chamberlin* Arachn. 38
Levinseniula *Cossman* Bry. 19
Libyana *Turati* Ins. 196
Linemera *Finlay* Moll. 46
Liochrysogaster *de Stackelberg* Ins. 262
Liocypris *Sars* Crust. 37
Liolamprogaster *Enderlein* Ins. 270
Liopiophila *Duda* Ins. 273
Lioyella *Enderlein* Ins. 261
Liparocrinus *Goldring* Echin. 27
Liparophaedusa *Lindholm* Moll. 68
Lipromima *Heikertinger* Ins. 176
Lipsanocystes *Ehlers & Leighly* Echin. 30
Lissoceratoides *Spath* Moll. 88
Lissoplocamia *Brondsted* Por. 6
Listropsis *Blaisdell* Ins. 139
Litadea *China* Ins. 285
Litharium *Dall* Moll. 48
Lo *Jordan & Seale* Pisces 38
Loboptychium *Schrammen* Por. 3
Lobotorna *Hampson* Ins. 196
Locharcha *Meyrick* Ins. 214
Loculiporella *Frédériks* Bry. 18
Locustacarus *Ewing* Arachn. 32
Lodderena *Iredale* Moll. 44
Loensia *Enderlein* Ins. 301
Lois *Dyar* Ins. 196
Lomanius *Roewer* Arachn. 25
Lonchodelphis *G. M. Allen* Mam. 54
Longicyatholaimus *Micoletzky* Vermes 30
Longirostrum *Wakiya* Pisces 36
Lophiophora *Schrammen* Por. 6
Lophochiton *Ashby* Moll. 41
Lophocricetus *Schlosser* Mam. 46
Lophodelta *Hampson* Ins. 196
Loriolometra *Gislén* Echin. 27
Lourinia *Wilson* Crust. 32
Luheella *Baer* Vermes 26
Lujaiella *Hustache* Ins. 161
Lulodes *Enderlein* Ins. 270
Lundstroemiella *Kieffer* Ins. 242
Lundstroemiola *Kieffer* Ins. 242
Lusitanoceras *Pereira de Sousa* Moll. 88
Luteomantis *Sjöstedt* Ins. 310
Luzonotroglops *Pic* Ins. 140
Lycomedicus *Roewer* Arachn. 27
Lycopodita *Pic* Ins. 152
Lycorhinus *Haughton* Rept. 37
Lysastrosoma *Fisher* Echin. 20
Lytha *Frédérics* Brach. 11
Lytotropites *Spath* Moll. 88

Macateella *Drake* Ins. 286
Macroartactes *Pic* Ins. 153
Macroceryle *Laubmann* Aves 58
Macrodasys *Remans* Vermes 32
Macrodea *Casey* Ins. 134
Macrogenis *Matthew* Mam. 51
Macrogyropus *Ewing* Ins. 300
Macromeracis *Enderlein* Ins. 253
Macropelobates *Noble* Rept. 40
Macrophysaliophora *Reisinger* Vermes 23
Magnatica *Marwick* Moll. 50
Maia *Frédérics* Brach. 11
Malabaria *Stephenson* Vermes 36
Maladia *Walcott* Arachn. 16
Malpha *Myers* Ins. 289
Mandibularea *Herre* Pisces 31
Manoserica *Moser* Ins. 149
Maoritipula *Alexander* Ins. 250
Maorivetia *Finlay* Moll. 54
Maquoketocrinus *Slocum & Foerste* Echin. 27
Maracandellus *Roewer* Arachn. 26
Mars *Jordan & Seale* Pisces 38
Mastigoceras *Handschin* Ins. 317
Mastigomyia *Becker* Ins. 259
Mastophorus *Schrammen* Por. 6
Masurga *Meyrick* Ins. 215
Mauginia *Turati* Ins. 214
Mawsonella *Brady* Crust. 35
Mayaites *Spath* Moll. 88
Mediotipula *Pierre* Ins. 250
Megabates *Viets* Arachn. 34
Megachiloides *Mitchell* Ins. 222
Megalcedo *Laubmann* Aves 58
Megalovis *Schaub* Mam. 53
Megaphanaeus *d'Olsoufieff* Ins. 147
Megaphragma *Timberlake* Ins. 232
Megapipistrellus *Bianchi* Mam. 39
Megatryphon *Cockerell* Ins. 234
Megulopa *Lindberg* Ins. 294
Meizoglossa *Hulstaert* Ins. 196
Melanopsacus *Jordan* Ins. 166
Melanorosaurus *Haughton* Rept. 35
Melchiorites *Spath* Moll. 88
Melliteryx *Iredale* Moll. 78
Mendicula *Iredale* Moll. 78
Meringomeria *Enderlein* Ins. 270
Merioproscelum *Verhoeff* Arachn. 38
Meropleon *Dyar* Ins. 197
Mesegropa *Baker* Ins. 290
Mesembreosa *Hulstaert* Ins. 196
Mesoclanculus *Iredale* Moll. 44
Mesoclis *Loew* Ins. 257
Mesoctenia *Enderlein* Ins. 270
Mesomyza *Enderlein* Ins. 253
Metabolaea, *Meyrick* Ins. 215
Metachilon *Roewer* Arachn. 26
Metadorcatoma *Scott* Ins. 138
Metagonyleptoides *Mello-Leitao* Arachn 27
Metahyamus *Roewer* Arachn. 26
Metallophanaeus, *d'Olsoufieff*, Ins. 147
Metambasia *Stephensen* Crust. 28
Metapellobunus *Roewer* Arachn. 25
Metapenta *Loew* Ins. 257
Metaposthia *Palombi* Vermes 23
Metapterodon *Stromer* Mam. 41
Metapygoplus *Roewer* Arachn. 26
Metassamia *Thorell* Arachn. 26
Metatheca *Scott* Ins. 138
Meteoristis *Meyrick* Ins. 215
Metereca *Roewer* Arachn. 26
Metophioceras *Spath* Moll. 88
Metopolophium *Mordvilko* Ins. 295
Metopomycter *Gilbert* Pisces 33
Metoposparga *Enderlein* Ins. 270
Microbucco *A. Roberts* Aves 60
Microdulia *Jordan* Ins., 204
Microlechia *Turati* Ins. 215
Microloa *Aurivillius* Ins. 171
Microphanchax *Myers* Pisces 34
Microplocia *Heller* Ins. 171
Microstenogena *Pic* Ins. 154
Microtylostylifer *Dendy* Por. 6
Microzetes *Heller* Ins. 161
Mictocrinus *Goldring* Echin. 27
Mike *Werner* Rept. 33
Mimelenchus *Iredale* Moll. 44
Mimepadanus *Roewer* Arachn. 25
Mimopictis *Turati* Ins. 215
Mimoselenopalpus *Pic* Ins. 157
Minopa *Iredale* Moll. 44
Mioctenopsylla *Rothschild* Ins. 278
Mionictis *Matthew* Mam. 42
Miopsaras *Gilbert* Pisces 40
Miradorius *Roewer* Arachn. 27
Miralinda *Lindholm* Moll. 68
Miscrocancilla *Dall* Moll. 56
Mjöbergodesmus *Verhoeff* Arachn. 38
Modicia *Walcott* Arachn. 16
Moenocrinus *Hildebrand* Echin. 27
Molipteryx *Kiritshenko* Ins. 284
Molochrus *Heller* Ins. 168
Monachops *Wilson* Crust. 32
Monalaria *Marwick* Moll. 49
Monogyropus *Ewing* Ins. 301
Monosyringa *Brondsted* Por. 6
Monotocheirodon *Pearson* Pisces 30
Montorana *Vogt* Rept. 38
Moosia *Walcott* Arachn. 16
Moumina *Frédérics* Brach. 11
Moxomia *Walcott* Arachn. 16
Mugilops *Meek & Hildebrand* Pisces 37
Multiplicaria *Lindholm* Moll. 68
Mundaria, *Lindholm* Moll. 68
Munella *Frédérics* Brach. 11
Munia *Frédérics* Brach. 11
Munroella *Bezzi* Ins. 272
Munroiana *Curran* Ins. 259
Myadesma *Clark* Moll. 82

Mycerinicella *Heller* Ins. 171
Myconita *Meyrick* Ins. 215
Mydaselpis *Bezzi* Ins. 256
Myomimus *Ognev* Mam. 45
Mystroleon *Banks* Ins. 282

Naccula *Iredale* Moll. 41
Nannoblastus *Wanner* Echin. 30
Nannophryganea *Martynov* Ins. 280
Nannopodellus *R.V. Chamberlin* Arachn. 37
Narcodina *Wilson* Crust. 32
Nassicola *Finlay* Moll. 56
Natvigia *Kieffer* Ins. 242
Neactina *Enderlein* Ins. 253
Neactinoceras *Spath* Moll. 88
Neamblysomus *Roberts* Mam. 41
Necrothrips *Priesner* Ins. 299
Nectodactylus *Miranda-Ribeiro* Rept. 39
Nematoprora *Gilbert* Pisces 33
Neoamphorophora *Mason* Ins. 296
Neobaetis *Navás* Ins. 305
Neochromadora *Micoletzky* Vermes 30
Neocopidosoma *Ishii* Ins. 230
Neocorodes *Meyrick* Ins. 215
Neocosmoceras *Blanchet* Moll. 88
Neocraspedites *Spath* Moll. 89
Neodecilaus *Lea* Ins. 162
Neodiplogaster *Cobb* Vermes 30
Neofundulus *Myers* Pisces 34
Neogorpis *Barber* Ins. 286
Neohelina *Malloch* Ins. 267
Neohydrotaea *Malloch* Ins. 268
Neoibalonius *Roewer* Arachn. 25
Neolaccogrypota *Lallemand* Ins. 291
Neoleucitus *Wendeler* Ins. 129
Neolissoceras *Spath* Moll. 89
Neontsira *Rohwer* Ins. 236
Neophryganea *Martynov* Ins. 280
Neoprotarchus *Cuchman* Ins. 234
Neopuliciphora *Schmitz & Mjöberg* Ins. 261
Neopygoplus *Roewer*, Arachn. 26
Neorhagio *Lindner* Ins. 255
Neorhinoleucophenga *Duda* Ins. 276
Neoroubaudia *Roubaud* Ins. 268
Neosclerosoma *Roewer* Arachn. 29
Neosclerus *Cameron* Ins. 129
Neosuris *Barber* Ins. 285
Neoteneriffiola *Hirst* Arachn. 33
Nephopheltes *Cushman* Ins. 234
Nephopullus *Brèthes* Ins. 136
Nerophidion *Werner* Rept. 33
Nervellius *Roman* Ins. 236
Nesomachilus *Tillyard* Ins. 316
Nesophylax *Murphy* Aves 51
Nesoporogaster *Verhoeff* Arachn. 37
Nesotheca *Scott* Ins. 138
Neurochorema *Tillyard* Ins. 280
Neurothrips *Hood* Ins. 299
Nipponomyia *Alexander* Ins. 250
Nitocrellea *Chappuis* Crust. 35
Noasaurus *Riabinin* Rept. 36
Noditermes *Sjöstedt* Ins. 303
Nolinophanes *Hulstaert* Ins. 192
Nomoneura *Bezzi* Ins. 256
Nopsides *R. V. Chamberlin* Arachn. 19
Normanellina *Cossman* Bry. 19
Nothippulus *Roewer* Arachn. 26
Notholimnophila *Alexander* Ins. 250
Nothomicrodon *Wheeler* Ins. 263
Nothorhyzobius *Brèthes* Ins. 136
Notobubastes *Carter* Ins. 145
Notocallista *Iredale* Moll. 81
Notocalviceps *Lea* Ins. 162
Notodelphyopsis *Schellenberg* Crust. 35
Notoecus *Stein* Ins. 265
Notogibbula *Iredale* Moll. 44
Notolepisma *Tillyard* Ins. 316
Notolimea *Iredale* Moll. 75
Notomyrtea *Iredale* Moll. 78
Notoprataeus *Carter* Ins. 153
Notopterophoroides *Schellenberg* Crust. 35
Nototettigometra *Muir* Ins. 290
Nototrintus *Carter* Ins. 153
Noyopsis *Navás* Ins. 305
Nuculoceras *Bisat* Moll. 89
Numella *Iredale* Moll. 78

Oamaruia *Finlay* Moll. 56
Obeliscoides *Graybill* Vermes 30
Obtusitermes *Snyder* Ins. 302
Oceanops *Jordan & Seale* Pisces 35
Ochetarcha, *Meyrick* Ins. 211
Ochrolitoides *Champion* Ins. 137
Octobunus *Roewer* Arachn. 26
Oculotrema *Stunkard* Vermes 25
Odhneria *Baer* Vermes 25
Odiellus *Roewer* Arachn. 29
Odontodiscoceras *Spath* Moll. 89
Oeklandia *Kieffer* Ins. 243
Ogmocoma *Meyrick* Ins. 215
Ogovea *Roewer* Arachn. 25
Ogtagoniceras *Spath* Moll. 89
Oidomorpha, *Laboissière* Ins. 177
Olafsenia *Oudemans* Arachn. 36
Oligoneuriella *Ulmer* Ins. 305
Oligoxystre *Vellard* Arachn. 19
Olisthanellinella *Reisinger* Vermes 23
Omanocoris *Kiritshenko* Ins. 284
Onceroparia *Enderlein* Ins. 270
Onchodia *Dall* Moll. 59
Oncophora *Schrammen* Por. 6
Oncoscelia *Enderlein* Ins. 270
Onychophilonthus *Neresheimer & Wagner* Ins. 130
Onymapata *Hulstaert* Ins. 192
Opadothrips *Priesner* Ins. 299

Operculea *Bolivar* Ins. 309
Ophiotermes *Sjöstedt* Ins. 303
Opoboa *Tessmann* Ins. 203
Orectocerina *Malloch* Ins. 265
Oreonetes *Loomis* Mam. 52
Oribotritia *Jacot* Arachn. 30
Ornithacris *Uvarov* Ins. 314
Orthezinella *Silvestri* Ins. 297
Orthocyclina *Vlerk* Prot. 24
Orthodiscus *Schrammen* Por. 3
Orthonops *R. V. Chamberlin* Arachn. 19
Ortmannia *Schrammen* Por. 6
Orynipus *Brèthes* Isn. 136
Ospatulus *Herre* Pisces 31
Otoplacosoma *Verhoeff* Arachn. 38
Ouroporopterus *Lea* Ins. 162
Ovidoencyrtus *Girault* Ins. 230
Oxyphortica *Duda* Ins. 276
Oxysactis *Meyrick* Ins. 215
Oxystyloptera *Duda* Ins. 276

Pachychelonus *Brues* Ins. 236
Pachygeneia *Meyrick* Ins. 215
Pachylichus *Roewer* Arachn. 25
Pachyneres *Greene* Ins. 258
Pachyophis *Werner* Rept. 33
Pachypegma, *Schrammen* Por. 3
Pachyscaphiduim *Achard* Ins. 132
Pachyselis *Schrammen* Por. 6
Paczoskia *Mordvilko* Ins. 296
Padangia *Werner* Rept. 33
Palaeantedon *Gislén* Echin. 28
Palaeocomaster *Gislén* Echin. 28
Palaeoscaptor *Matthew & Granger* Mam. 40
Palaeozoanthus *Carlgren* Coel. 15
Paletonidistus *Lea* Ins. 162
Palinorsa *Meyrick* Ins. 215
Pallasiceras *Spath* Moll. 92
Palliseria *Wilson* Moll. 42
Palmenella *Hirschmann* Crust. 37
Palmenia *Lestage* Ins. 305
Paomys *Matthew* Mam. 46
Papiroides *Folsom* Ins. 317
Parabathynomus *Barnard* Crust. 26
Paracaenopus *Breuning* Mam. 50
Paracanthonchus *Micoletzky* Vermes 31
Parachilon *Roewer* Arachn. 26
Paraclepsis *Harding* Vermes 37
Paracollinella *Duda* Ins. 268
Paracycnotrachelus *Voss* Ins. 162
Paracypretta *Sars* Crust. 37
Paracyttopsis *Gilchrist & Bonde* Pisces 35
Paradescanso *Vellard* Arachn. 24
Paradeudora *Obenberger* Ins. 146
Paradines *Dall* Moll. 62
Paradoxolaimus *Kreis* Vermes 31
Parâdrosophila *Duda* Ins. 275
Paraduvalius *Knirsch* Ins. 126
Paragattendorfia *Schindewolf* Moll. 89
Paragliricola *Ewing* Ins. 301
Paragyrinus *Ochs* Ins. 127
Paraheteronyx *Moser* Ins. 149
Parahigginsia *Dendy* Por. 6
Parahinoleucophenga *Duda* Ins. 276
Parahydriena *Muir* Ins. 289
Paralasonia *Muir* Ins. 291
Paralibrotus *Stephensen* Crust. 29
Paralophia *Aurivillius* Ins. 171
Paramanis *Pocock* Mam. 55
Parametopina *Borgmeier* Ins. 261
Paramycodrosophila *Duda* Ins. 276
Paramyotis *Bianchi* Mam. 39
Paranaxia *Rathbun* Crust. 21
Paranoplium *Casey* Ins. 168
Paranotodelphys *Schellenberg* Crust. 35
Parapandarus *Wilson* Crust. 35
Parapatoceras *Spath* Moll. 89
Parapedetes *Stromer* Mam. 48
Parapempheris *Bonde* Pisces 36
Paraphanolaimus *Micoletzky* Vermes 31
Paraphenice *Muir* Ins. 290
Paraplagiorchis *Dollfus* Vermes 25
Paraplattostoma *Heller* Ins. 171
Parapsinota *Duda* Ins. 276
Paraquilonia *Neveu-Lemaire* Vermes 31
Parasagena *Dall* Moll. 56
Parascaphium *Achard* Ins. 132
Parascaptomyza *Duda* Ins. 275
Paraschneideria *Nieschulz* Prot. 25
Parasecodes *Mercet* Ins. 231
Paraseleuca *Roewer* Arachn. 26
Paraspelaeum *Schrammen* Por. 6
Parasphaerocera *Spuler* Ins. 268
Parastacilla *Hale* Crust. 26
Parasynrix *Finlay* Moll. 58
Parataracticus *Cole* Ins. 257
Paratenerus *Chapin* Ins. 139
Paratheca *Scott* Ins. 138
Paratobelus *Whitehouse* Moll. 89
Paratrachelophorus *Voss* Ins. 162
Paraustraliosoma *Verhoeff* Arachn. 37
Parazygocera *Heller* Ins. 171
Pareatonia *McLearn* Brach. 9
Parendacustes *Chopard* Ins. 311
Parengonoceras *Spath* Moll. 89
Parepicausta *Enderlein* Ins. 270
Parepitoxus *Desbordes* Ins. 133
Pareptesicus *Bianchi* Mam. 39
Parestheria *Stein* Ins. 265
Pariacis *Enderlein* Ins. 270
Parietobalaena *Kellogg* Mam. 54
Parindalmus *Achard* Ins. 135
Parodiellus *Roewer* Arachn. 29
Parophiocephalus *Senna* Pisces 37
Paroxyclaenus *Teilhard* Mam. 51
Paroxyethira *Mosely* Ins. 280

Paroxystomina *Micoletzky* Vermes 31
Parrotia *Kieffer*, Ins. 243
Patellanax *Iredale* Moll. 41
Payettia *Dall* Moll. 62
Pectorhyncha *McLearn* Brach. 9
Peculator *Iredale* Moll. 59
Peladoius *Roewer* Arachn. 27
Pelargopsioides *Laubmann* Aves 58
Pelopatis *Bishop* Arachn. 23
Peloropsis *Gilbert* Pisces 39
Peltarthropterus *Kolbe* Ins. 126
Peltoceratoides *Spath* Moll. 89
Peltocrioceras *Spath* Moll. 89
Peltolytoceras *Spath* Moll. 89
Penesilurus *Herre* Pisces 32
Perandropora *Palombi* Vermes 23
Pericuris *R. V. Chamberlin* Arachn. 19
Peridiomys *Matthew* Mam. 47
Perihammus *Aurivillius* Ins. 171
Perissasterias *Clark* Echin. 20
Permohymen *Tillyard* Ins. 237
Peronotrochus *Enderlein* Ins. 270
Peruinia *Polinski* Moll. 68
Pervicacia *Iredale* Moll. 58
Pessograptis *Meyrick* Ins. 216
Pezetaera *Meyrick* Ins. 216
Pfrille *Jordan* Pisces 31
Phaenopelma *Kieffer* Ins. 243
Phaeogloea *Pascher* Prot. 29
Phagoborus *Myers* Pisces 30
Phalarotarsa *Meyrick* Ins. 216
Phenatoma *Finlay* Moll. 58
Phenoscaphium *Achard* Ins. 132
Philametris *Meyrick* Ins. 216
Phileciton *Chopard* Ins. 309
Philorectus *Voss* Ins. 162
Philorheithrus *Tillyard* Ins, 280
Phiomyoides *Stromer* Mam. 48
Phobosuchus *Nopcsa* Rept. 35
Phorticella *Duda* Ins. 276
Phragmacossia *Schawerda* Ins. 205
Phreatichthys *Vinciguerra* Pisces 31
Phruriastis *Meyrick* Ins. 216
Phryganopsis *Martynov* Ins. 280
Phrypeus *Casey* Ins. 125
Phthonosteres *China* Ins. 285
Phygosaurus *Arthaber* Rept. 37
Phyllodermia *Schrammen* Por. 6
Phylopatris *Meyrick* Ins. 216
Phytomyzoneura *Stein* Ins. 266
Pictostyloptera *Duda* Ins. 276
Pigostyla *Tagliani* Prot. 31
Pimelomera *Moser* Ins. 149
Pirgula *Tessmann* Ins. 203
Pisistrata *Meyrick* Ins. 216
Placanthes *Meyrick* Ins. 216
Placometra *Gislén* Echin. 28
Plagiopus *Brady* Crust. 35
Plagiorhyncha *McLearn* Brach. 9
Plategeocranus *Sellnick* Arachn. 30
Platomma *Bezzi* Ins. 272
Platuronides *Roule & Bertin* Pisces 33
Platychauliodes *Esben-Petersen* Ins. 282
Platyproctus *Lindberg* Ins. 294
Platyscapus *Hustache* Ins. 163
Plectaria *Dall* Moll. 56
Plectrogenium *Gilbert* Pisces 39
Plectroglyphidodon *Fowler & Ball* Pisces 37
Plesippus *Matthew* Mam. 51
Pleskeola *de Stackelberg* Ins. 263
Plieningeria *Krausse* Mam. 56
Plionictis *Matthew* Mam. 42
Plistoptychia *Lindholm* Moll. 68
Plutorectella *Strand* Ins. 205
Podoctinus *Roewer* Arachn. 26
Pogonopleura *Enderlein* Ins. 261
Pogonoscopus *China* Ins. 294
Poliometra *Clark* Echin. 28
Pollicipalpus *Viets* Arachn. 35
Polopinus *Casey* Ins. 154
Polychroides *Noble* Rept. 31
Polyporina *Frédériks* Bry. 18
Polyposthides *Palombi* Vermes 23
Polyproctus *Schrammen* Por. 6
Polyrhipidium *Schrammen* Por. 6
Polystomellina *Yabe & Hanzawa* Prot. 24
Polystomiceras *Spath* Moll. 90
Polythei *Leigh-Sharpe* Prot. 27
Polytrichophora *Cresson* Ins. 275
Pontogenessa *Monro* Vermes 35
Pontophaedusa *Lindholm* Moll. 68
Poratobolus *Verhoeff* Arachn. 38
Porohalicarus *Thor* Arachn. 35
Poropterculus *Lea* Ins. 163
Poropterellus *Lea* Ins. 163
Poropterinus *Lea* Ins. 163
Potomacmaea *Peile* Moll. 41
Povelsenia *Oudemans* Arachn. 36
Praeacanthonchus *Micoletzky* Vermes 31
Praebarrettia *Trechmann* Moll. 82
Praedendrothrips *Priesner* Ins. 299
Pratulum *Iredale* Moll. 81
Pravispira *Lindholm* Moll. 68
Presbytiscus *Pocock* Mam. 38
Prionellus *Casey* Ins. 166
Prionobelum *Verhoeff* Arachn. 38
Proboscitermes *Sjöstedt* Ins. 303
Procamptoceras *Schaub* Mam. 54
Procatharosia *Villeneuve* Ins. 266
Procerastus *Wenz* Moll. 68
Procerothrips *Bagnall* Ins. 299
Prochromadorella *Micoletzky* Vermes 31
Procheloniceras *Spath* Moll. 90
Procteria *Werner* Rept. 33
Procyclotopsis *Wenz* Moll. 92
Procynocephalus *Schlosser* Mam. 38
Prodentobunus *Roewer* Arachn. 29

Prodesmodora *Micoletzky* Vermes 31
Prodontocharax *Pearson* Pisces 30
Prodotia *Dall* Moll. 56
Progoniaster *Döderlein* Echin. 20
Prohyrax *Stromer* Mam. 49
Proleeuwenia *Priesner* Ins. 299
Promononchus *Micoletzky* Vermes 31
Promourlonia *Longstaff* Moll. 43
Proncholaimus *Micoletzky* Vermes 31
Propalaeoryx *Stromer* Mam. 54
Propefusus *Iredale* Moll. 54
Propeleda *Iredale* Moll. 71
Propesinum *Iredale* Moll. 51
Prophryganea *Martynov* Ins. 280
Propleopus *Longman* Mam. 55
Propsilocerus *Kieffer* Ins. 243
Propygoplus *Roewer* Arachn. 26
Prorachias *Mello-Leitao* Arachn. 19
Proscelomerion *Verhoeff* Arachn. 38
Proscopus *Jordan* Ins. 166
Prosogyrotrigonia *Krumbeck* Moll. 72
Prosthiochaeta *Enderlein* Ins. 271
Prostygnellus *Roewer* Arachn. 28
Protanclyoceras *Spath* Moll. 90
Protanytarsus *Kieffer* Ins. 243
Protelsonia *Méhely* Crust. 25
Protogyropus *Ewing* Ins. 301
Protohymen *Tillyard* Ins. 237
Protonerius *de Meijere* Ins. 274
Protopiophila *Duda* Ins. 273
Protoplanella *Reisinger* Vermes 23
Protosemidalis *Karny* Ins. 282
Protothrips *Priesner* Ins. 299
Provirgatites *Lewinski* Moll. 90
Psalidister *Reichensperger* Ins. 133
Psammoaetus *A. Roberts* Aves 56
Psegmoptera *Enderlein* Ins. 253
Pselaphias *Jordan & Seale* Pisces 38
Pseudacanthorhinus *Heller* Ins. 163
Pseudacanthotermes *Sjöstedt* Ins. 303
Pseudaethria *Schaus* Ins. 190
Pseudalcedo *Laubmann* Aves 58
Pseudaphrophora *Schmidt* Ins. 291
Pseudaporosa *Alexander* Ins. 249
Pseudbarydia *Hampson* Ins. 198
Pseudephalus *Casey* Ins. 154
Pseudendromis *Köhler* Ins. 205
Pseudhydrovatus *Peschet* Ins. 127
Pseudocassina *Ahl* Rept. 39
Pseudocollinella *Duda* Ins. 268
Pseudocongella *Moser* Ins. 150
Pseudodictya *Schmidt* Ins. 289
Pseudoedaleosia *Strand* Ins. 192
Pseudoenanea *Pic* Ins. 154
Pseudomadius *Chapin* Ins. 139
Pseudomydaus *Lea* Ins. 163
Pseudonephelotus *Schwarzer* Ins. 171
Pseudonidistus *Lea* Ins. 163
Pseudoosterella *Spath* Moll. 90
Pseudoöthrix *Brady* Crust. 36
Pseudophyllomimus *Karny* Ins. 312
Pseudopolia *Turati* Ins. 198
Pseudoptilops *Stein* Ins. 266
Pseudorbitoides *Douville* Prot. 24
Pseudosaynella *Spath* Moll. 90
Pseudoschlotheimia *Spath* Moll. 90
Pseudoscytalia *Schrammen* Por. 6
Pseudosmilia *Brèthes* Ins. 136
Pseudostrongylosoma *Verhoeff* Arachn. 38
Pseudotanusia *Vignon* Ins. 312
Pseudothurmannia *Spath* Moll. 90
Pseudotictya *Schmidt* Ins. 289
Pseudozonophyllum *Wedekind* Coel. 16
Pseuduromacer *Werner* Rept. 33
Psychromnestra *Meyrick* Ins. 216
Pterinocrinus *Goldring* Echin. 28
Pterobates *Bezzi* Ins. 258
Pteroglanis *Pearson* Pisces 32
Pteroporopterus *Lea* Ins. 163
Pterygotomaschalos *Stunkard* Vermes 25
Ptiliodina *Casey* Ins. 131
Ptiliopycna *Casey* Ins. 131
Ptiloceroides *Villeneuve* Ins. 266
Pugillaria *Iredale* Moll. 62
Pugiodrosophila *Duda* Ins. 275
Pulicomorpha *Mann* Ins. 130
Puria *Roewer* Arachn. 26
Pycnocentrodes *Tillyard* Ins. 280
Pycnogaster *Schrammen* Por. 3
Pygmaeonassa *Annandale* Moll. 56

Queenslandesmus *Verhoeff* Arachn. 38
Queenslandobolus *Verhoeff* Arachn. 38

Raatzbrockmannia *Schmidt* Ins. 290
Raciborskia *Woloszynska* Prot. 30
Radulphus *Iredale* Moll. 57
Raimondiceras *Spath* Moll. 90
Raizoda *Muir* Ins. 290
Ranosoma *Ahl* Rept. 38
Raoiella *Hirst* Arachn. 33
Raphaelonia *Girault* Ins. 231
Redistes *Casey* Ins. 154
Reditaenia *Sambon* Vermes 27
Regina *Martynov* Ins. 280
Reminius *Casey* Ins. 154
Reticuloceras *Bisat* Moll. 90
Reubenia *Cox* Moll. 73
Rhabdoscytus *Horváth* Ins. 287
Rhabdotum *Schrammen* Por. 7
Rhachicerella *Enderlein* Ins. 253
Rhathamictis *Meyrick* Ins. 216
Rhinorchilus *W. de W. Miller* Aves 65
Rhinoplocens *Gyldenstolpe* Aves 73
Rhithotriton *Nesterov* Rept. 40
Rhopaloblastus *Wanner* Echin. 30
Rhophodon *Hedley* Moll. 66
Rhymoleia *Edwards* Ins. 238

Rhynchoedaspis *Bezzi* Ins. 272
Rhynchotona *Meyrick* Ins. 216
Rhyneptesicus *Bianchi* Mam. 39
Rhysophora *Cresson* Ins. 275
Rhyxiderma *Moser* Ins. 150
Rickettia *Bianchi* Mam. 39
Rimetella *Hanna* Moll. 92
Rimulanax *Iredale* Moll. 43
Rivelliomima *Bezzi* Ins. 272
Riveticranaus *Roewer* Arachn. 28
Rivetinus *Roewer* Arachn. 26
Rixa *Iredale* Moll. 43
Rochefortina *Dall* Moll. 78
Rohdendorfia *Smirnov* Ins. 263
Rudolfia *Wilson* Crust. 32
Rugobela *Finlay* Moll. 54
Rühlella *Schmidt* Ins. 289
Ruthenica *Lindholm* Moll. 68

Sacodiscus *Wilson* Crust. 32
Sagartiogeton *Carlgren* Coel. 16
Sainouron *Sandon* Prot. 29
Sajanocarabus *Lutshnik* Ins. 123
Salaputium *Iredale* Moll. 78
Salsipotens *Iredale* Moll. 44
Samariscus *Gilbert* Pisces 40
Santinezia *Roewer* Arachn. 28
Sarsameira *Wilson* Crust. 32
Sarsocletodes *Wilson* Crust. 32
Sathrogenes *Meyrick* Ins. 216
Sauricola *Chapin* Vermes 31
Saurositus *Macfie* Vermes 31
Sauvagea *Jordan & Seale* Pisces 39
Scalariogyra *Gerth* Coel. 16
Scalez *Hanna & Gaylord* Moll. 92
Scapellites *Pruvost* Pisces 26
Scaphidiolum *Achard* Ins. 132
Scaphidopsis *Achard* Ins. 132
Scaptodrosophila *Duda* Ins. 276
Scaptomyza *Duda* Ins. 275
Schedocentrus *Hebard* Ins. 313
Schönbaueria *Enderlein* Ins. 239
Sciopolina *Curran* Ins. 260
Scissulina *Dall* Moll. 80
Scissurona *Iredale* Moll. 43
Sclerocypris *Sars* Crust. 37
Sclerograptis *Meyrick* Ins. 217
Scolomys *H. E. Anthony* Mam. 47
Scolypopites *Tillyard* Ins. 291
Scutopiloxys *Pic* Ins. 154
Scutoribates *Sellnick* Arachn. 31
Seilarex *Iredale* Moll. 49
Selenophaedusa *Lindholm* Moll. 68
Semelangulus *Iredale* Moll. 80
Semiometra *Gislén* Echin. 29
Semnocosma *Meyrick* Ins. 217
Seriolina *Wakiya* Pisces 36
Sermowaius *Roewer* Arachn. 26
Serpenticola *Ewing* Arachn. 32
Sibogaster *Döderlein* Echin. 21
Sibolgia *Roewer* Arachn. 26
Sijucavernicus *Roewer* Arachn. 26
Silgonda *Heller* Ins. 171
Simalurius *Roewer* Arachn. 26
Simianellus *van Emden* Ins. 141
Sinaiella *Uvarov* Ins. 310
Sinonovacula *Prashad* Moll. 82
Sinotagus *Kiritshenko* Ins. 284
Siphonophaedusa *Lindholm* Moll. 68
Sipia *Hellmayr* Aves 61
Sirogenes *Meyrick* Ins. 217
Sitalcicus *Roewer* Arachn. 26
Skuseomyia *Alexander* Ins. 251
Smeringaspis *Spaeth* Ins. 178
Smilepholcia *Prout & Talbot* Ins. 198
Sminthoides *Schlosser* Mam. 47
Smithoceras *Hanna* Moll. 91
Snyderidia *Gilbert* Pisces 39
Solamen *Iredale* Moll. 73
Solisorex *Thomas* Mam. 40
Sophismalepas *Iredale* Moll. 43
Soritena *Schaus* Ins. 192
Spartimas *Enderlein* Ins. 253
Spatagobrissus *Clark* Echin. 18
Spectamen *Iredale* Moll. 44
Spelaeophryne *Ahl* Rept. 39
Speonemobius *Chopard* Ins. 311
Sphaerobelum *Verhoeff* Arachn. 39
Sphaerodinium *Woloszynska* Prot. 30
Sphaerometra *Gislén* Echin. 29
Sphaerostilbus *Champion* Ins. 137
Sphaerotocrinus *Goldring* Echin. 29
Sphaerelictis *Meyrick* Ins. 217
Spharoschisma *Wanner* Echin. 30
Sphenella *Duvergier* Bry. 20
Sphinctodere *Aurivillius* Ins. 169
Sphodrophoxus *Hebard* Ins. 313
Spinodrosophila *Duda* Ins. 275
Spinulophila *Duda* Ins. 275
Spirelytha *Frédérics* Brach. 11
Spiriferellina *Frédérics* Brach. 12
Spiroecus *Longstaff* Moll. 59
Spirophrya *Chatton & Lwoff* Prot. 31
Sporadothelion *Schrammen* Por. 7
Spuriostyloptera *Duda* Ins. 276
Stachyostoma *Meyrick* Ins. 217
Stactobiella *Martynov* Ins. 281
Stagmaturgis *Meyrick* Ins. 217
Staszicella *Woloszynska* Prot. 30
Steganagaphanthia *Pic* Ins. 171
Steleoneura *Stein* Ins. 266
Stelidium *Schrammen* Por. 7
Stemonidium *Gilbert* Pisces 33
Stenimas *Enderlein* Ins. 253
Steniridia *Casey* Ins. 125
Stenitus *R. V. Chamberlin* Arachn. 39
Stenoneurellys *Borgmeier* Ins. 261
Stenoparia *Stein* Ins. 266
Stenosoma *Turati* Ins. 198
Steremniodes *Meyrick* Ins. 217

Stethopristes *Gilbert* Pisces 35
Stichillus *Enderlein* Ins. 361
Stictoleptura *Casey* Ins. 167
Stictomys *Thomas* Mam. 48
Stictospilus *Bréthes* Ins. 136
Stilbomimus *Champion* Ins. 137
Stipator *Iredale* Moll. 44
Stiphrostola *Meyrick* Ins. 217
Stoastomops *Baker* Moll. 45
Streptocalanus *Brady* Crust. 36
Striatotegmen *Haughton* Ins. 309
Strieremaeus *Sellnick* Arachn. 31
Strigichiton *Hull* Moll. 41
Strobiligera *Dall* Moll. 49
Stromatolites *Brière* Coel. 17
Strongylovelia *Esaki* Ins. 287
Styloplanella *Findenegg* Vermes 23
Styloptera *Duda* Ins. 277
Suavotrochus *Dall* Moll. 44
Subastieria *Spath* Moll. 91
Subcraspedites *Spath* Moll. 86
Subcurtisella *Roman* Ins. 236
Subgrossouvria *Spath* Moll. 91
Subkossmatia *Spath* Moll. 91
Subneumayria *Spath* Moll. 91
Suboosterella *Spath* Moll. 91
Subsaynella *Spath* Moll. 91
Subtilicyathus *Zuffardi-Commerci* Coel. 17
Subzeidora *Iredale* Moll. 43
Sulconacca *Marwick* Moll. 51
Sulcophanaeus *d'Olsoufieff* Ins. 147
Sudaria *Roewer* Arachn. 26
Sycophantomorphus *Pic* Ins. 154
Sycosaurus *Haughton* Rept. 37
Symplectella *Dendy* Por. 3
Synaspidia *Timberlake* Ins. 230
Syncathedra *Meyrick* Ins. 217
Synchorema *Tillyard* Ins. 281
Syndactylactis *Carlgren* Coel. 17
Synechops *Voss* Ins. 160
Synetister *Reichensperger* Ins. 133
Synoditulus *Reichensperger* Ins. 133
Synpsilocerus *Kieffer* Ins. 244

Tachinoceras *de Meijere* Ins. 274
Taenicephalus *Walcott* Arachn. 17
Taeniochauliodes *Esben-Petersen* Ins. 282
Taeniopsetta *Gilbert* Pisces 39
Talabrica *Iredale* Moll. 79
Talpella *Jordan* Ins. 166
Tamarixia *Mercet* Ins. 231
Tanarus *Hustache* Ins. 163
Tangasaurus *Haughton* Rept. 36
Tanyarches *Meyrick* Ins. 217
Tanygastrella *Duda* Ins. 277
Tanypremnodes *Alexander* Ins. 251
Tarsocamenta *Moser* Ins. 150
Tarsonops *R. V. Chamberlin* Arachn. 19
Taurocopris *d'Olsoufieff* Ins. 147
Tectocymba *Sellnick* Arachn. 31
Tedaniopsis *Dendy* Por. 7
Tegocassis *Spaeth* Ins. 178
Teippus *R. V. Chamberlin* Arachn. 24
Teleocoma *Aldrich* Ins. 274
Telphes *Wolfrum* Ins. 166
Teneropsis *Chapin* Ins. 139
Tenuopus *Curran* Ins. 260
Tepalicus *Lea* Ins. 164
Teratodia *Bergroth* Ins. 287
Termitaradus *Myers* Ins. 285
Terporopus *Lea* Ins. 164
Tessmannella *Enderlein* Ins. 271
Tessmanniola *Enderlein* Ins. 271
Testifrondosa *Bhalerao* Vermes 25
Tetengia *Lea* Ins. 164
Tetrabelus *Whitehouse* Moll. 91
Tetraceratium *Muir* Ins. 291
Tetraceratothrips *Bagnall* Ins. 300
Tetrachaetina *Enderlein* Ins. 271
Tetragonyssus *Ewing* Arachn. 32
Tetragyropus *Ewing* Ins. 301
Tetrapocillon *Brondsted* Por. 7
Tetratanytarsus *Kieffer* Ins. 244
Tetronychia *Stephensen* Crust. 29
Thamnocrinus *Goldring* Echin. 29
Thaumaceratopus *Verhoeff* Arachn. 39
Thaumastodus *Champion* Ins. 137
Thaumatoblastus *Wanner* Echin. 30
Thaumatorhynchus *Parker* Rept. 31
Thelyasceta *Meyrick* Ins. 217
Therezopolis *Mello-Leitao* Arachn. 28
Thermosbaena *Monod* Crust. 25
Thespesiopsyllus *Wilson* Crust. 32
Thienemannia *Viets* Arachn. 33
Thomsenia *Panning* Crust. 27
Thomsonica *Cossman* Brach. 10
Thoostoma *Wilson* Crust. 32
Thracidora *Iredale* Moll. 83
Threnolais *A. Roberts* Aves 67
Thriponea *Hulstaert* Ins. 199
Thyliphaps *Murphy* Aves 50
Thymapion *Deville* Ins. 158
Tidopterus *R. V. Chamberlin* Arachn. 39
Timarchomela *Achard* Ins. 175
Timoria *Krumbeck* Moll. 73
Tiphobiosis *Tillyard* Ins. 281
Tiriteana *Myers* Ins. 289
Titanobaris *Hustache* Ins. 164
Titanosarcolites *Trechmann* Moll. 82
Titihoia *A. Roberts* Aves 52
Tolytia *Schaus* Ins. 206
Tomotanytarsus *Kieffer* Ins. 243
Tonkinobelum *Verhoeff* Arachn. 39
Tonohamites *Spath* Moll. 91
Tornierella *Ahl* Rept. 39
Torquatisphinctes *Spath* Moll. 91
Tostonia *Walcott* Arachn. 17
Trachyaphthona *Heikertinger* Ins. 176

Trachynotus *Schrammen* Por. 7
Tragolytoceras *Spath* Moll. 91
Tranestoma *Wilson* Crust. 32
Trapezoptera *Hulstaert* Ins. 199
Trevessa *China* Ins. 287
Triaenopholis *Werner* Rept. 33
Trichactia *Stein* Ins. 266
Trichiaspiphenga *Duda* Ins. 276
Trichostiria *Enderlein* Ins. 261
Trichotermes *Sjöstedt* Ins. 303
Tridachiella *MacFarland* Moll. 61
Triglochinura *Mello-Leitao* Arachn. 28
Trigonaspis *Spaeth* Ins. 178
Trilobella *Woodward* Moll. 69
Trimma *Jordan & Seale* Pisces 38
Trisophista *Meyrick* Ins. 218
Trissopelopia *Kieffer* Ins. 244
Tritonoturris *Dall* Moll. 58
Trochomusculus *Iredale* Moll. 73
Troglophila *Brunetti* Ins. 250
Trogocryptoides *Champion* Ins. 135
Tropidauchenia *Lindholm* Moll. 69
Tropiphlepsia *Muir* Ins. 290
Troya *Roewer* Arachn. 28
Trypanophion *Bezzi* Ins. 273
Trypetisoma *Malloch* Ins. 269
Tschernyscheuwirella *Frédérics* Brach. 8
Tumilitermes *Sjöstedt* Ins. 303
Tupaiodon *Matthew & Granger* Mam. 40
Turanena *Lindholm* Moll. 69
Turanogonia *Rohdendorf* Ins. 266
Turrhyssa *Dall* Moll. 58
Turritella *Wollaston* Moll. 65
Tvetenia *Kieffer* Ins. 244
Tyroborus *Oudemans* Arachn. 36
Tyrolichus *Oudemans* Arachn. 36
Tyrophagus *Oudemans* Arachn. 36
Tytocha *Schaus* Ins. 206

Ucebia *Walcott* Arachn. 17
Unguitermes *Sjöstedt* Ins. 303
Unicapsula *Davis* Prot. 26
Uniformitermes *Snyder* Ins. 302
Uralotimania *Riabinin* Coel. 17
Uromanis *Pocock* Mam. 55
Utia *Walcott* Arachn. 17

Vacerra *Iredale* Moll. 43
Vailima *Jordan & Seale* Pisces 38
Vaimosa *Jordan & Seale* Pisces 38
Varicosia *Hampson* Ins. 199
Ventrarma *Navás* Ins. 281
Verrunculus *Jordan* Pisces 40
Vettoria *Wilson* Crust. 32
Viatica *Garrett* Ins. 269
Vitreola *Jordan & Seale* Pisces 38
Vitrinopugio *Ihering* Moll. 92
Vogdesella *Baker* Crust. 38
Vosseleria *Uvarov* Ins. 315
Vosseleriana *Uvarov* Ins. 315
Vulmara *Schaus* Ins. 192

Waitea *Jordan & Seale* Pisces 38
Walterella *Romijn & Viets* Arachn. 33
Westerlundella *Lindholm* Moll. 69
Wetmorea *McAtee & Malloch* Ins. 287
Wilbernia *Walcott* Arachn. 17
Wintonia *Roewer* Arachn. 26

Xanthanomoea *Bezzi* Ins. 273
Xenacris *Hebard* Ins. 315
Xenocalliphora *Malloch* Ins. 266
Xenococcus *Silvestri* Ins. 297
Xenodus *Andrewes* Ins. 126
Xenophyes *Bergroth* Ins. 288
Xenornis *Chapman* Aves 61
Xenostegium *Walcott* Arachn. 17

Yania *Roewer* Arachn. 26
Yumates *R. V. Chamberlin* Arachn. 19

Zacerata *Coquillett* Ins. 273
Zacualpania *Dyar* Ins. 203
Zaumseilia *Schmidt* Ins. 289
Zavreliella *Kieffer* Ins. 244
Zealeda *Marwick* Moll. 71
Zelandoglochina *Alexander* Ins. 248
Zelandoptila *Tillyard* Ins. 281
Zella *Iredale* Moll. 58
Zenoporoterus *Lea* Ins. 164
Zipangia *Heikertinger* Ins. 176
Zonophyllum *Wedekind* Coel. 17
Zopheromantis *Tindale* Ins. 310
Zoroides *Berland* Arachn. 20
Zwickia *Oudemans* Arachn. 36
Zygospila *Achard* Ins. 175

SECOND SUPPLEMENTARY LIST OF ABBREVIATIONS WITH TITLES OF JOURNALS CONTAINING PAPERS DEALING WITH MATTERS OF ZOOLOGICAL IMPORTANCE.*

Abh. geol. Nat. Inst. Univ., Greifswald.—Abhandlungen aus dem geologisch-palaeontologischen Institut der Universität, Greifswald. — Ger.

Act. Schol. Med. Univ., Kioto.—Acta Scholae Medicinalis Universitatis Imperialis in Kioto. Universitas Imperialis in Kioto. — Japan.

Aichi J. Exper. Med., Nagoya.—The Aichi Journal of Experimental Medicine. Aichi Medical University, Nagoya. — Japan.

Amer. J. Hygiene, Baltimore.—American Journal of Hygiene, Baltimore. — U.S.

Amer. J. Path., Boston.—American Journal of Pathology (formerly Journal of Medical Research), Boston, Mass. — U.S.

Amer. J. Physical Anthrop., Washington.—American Journal of Physical Anthropology, Washington, D.C. — U.S.

Ann. Physiol. Physicochem. biol., Paris.—Annales de Physiologie et de le Physicochemie biologique, Paris. — Fr.

Ann. Mus. Zool. Univ., Napoli.—Annuario del Museo Zoologico della R. Universitâ di Napoli. — Ital.

Arb. biol. Oka-Sta., Murom.—Arbeiten der Biologischen Oka-Station zu Murom, Russland. — Rus.

Arb. Biol. Wolga-Station, Saratow.—Arbeiten der Biologischen Wolga-Station, Saratow. — Russ.

Arch. Anat. Hist. Embr., Strasbourg.—Archives d'Anatomie, d'Histologie et d'Embryologie, Strasbourg. — Fr.

Arch. exper. Zellforschung, Jena.—Archiv für experimentelle Zellforschung, Jena. — Ger.

Arch. Inst. Pasteur, Tunis.—Archives de l'Institute Pasteur de Tunis. — Tunisia.

Arch. Inst. Vital Brazil, Niteroi.—Archivos do Instituto Vital Brazil, Niteroi. — Brazil.

Arch. Hygiene, München.—Archiv für Hygiene, München & Berlin. — Ger.

Arch. Rybact. Polskiego, Bromberg.—Archivum Rybactiva Polskiego (Polish), Bydgoszcz (Bromberg). — Pol.

Badische Blät. Schädlings. Freiburg i. Br.—Badische Blätter fur Schädlingsbekampfung. [Beilage Badischen Ent. Ver.] Freiburg i. Br. — Ger.

Beitr. path. Anat. u. allg. Path., Jena.—Beiträge zur pathologischen Anatomie und zur allgemeinen Pathologie, Jena. — Ger.

Ber. Deutsch. Wiss. Kom. Meeresforsch., Berlin.—Berichte der Deutschen wissenschaftlichen Kommission für Meeresforschung, Berlin. — Ger.

Ber. Ohara Inst. landwirtsch. Fors., Kuraschiki [Japan].—Berichte des Ohara Instituts für landwirtschaftliche Forschungen in Kurachiki. — Japan.

---

* For the full list *see* Zool. Record vol. 59 for 1922 and for first supplementary list vol. 60 for 1923.

Biol. Generalis, Vienna.—Biologia Generalis: International Journal of General Biology, Vienna & Baltimore. — Austr.

Biol. Hung., Budapest.—Biologica Hungarica, Budapest. — Hung.

Bol. Mus. Nac., Rio de Janeiro.—Boletim do Museu Nacional do Rio de Janeiro. — Braz.

Bol. Soc. Ent. Brasil, Rio de J.—Boletim da Sociedade Entomologica do Brasil, Rio de Janeiro. — Braz.

Boll. Ist. Zool. Univ., Roma.—Bollettino dell' istituto zoologico della R. Università di Roma (Organo della Società Zoologica italiana). — [Printed at Livorno].

Boll. Ufficio Geol. Ital., Roma.—Bollettino del R. Ufficio Geologico d'Italia, Roma. — Ital.

Bul. Com. Géol., Leningrad.—Bulletins du Comité Géologique, Leningrad — Russ.

Bul. Bur. Applied Ichthyology, Leningrad.—Bulletin of the Bureau of Applied Ichthyology, Leningrad. — Russ.

Bull. Com. Geol. (Sec. Moscou), Petrograd.—Bulletins du Comité Géologique. Section de Moscou. Petrograd. — Russ.

Bul. Geol. Surv. Nigeria, Lagos.—Geological Survey of Nigeria. Bulletin. Lagos [Printed, London]. — Nigeria.

Bul. histol. appl. phys. path. technique, Lyon.—Bulletin d'histologie appliquée à la physiologie et à la pathologie et de technique microscopique, Lyon et Paris. — Fr.

Bul. Inst. Rech. Biol. Perm.—Bulletin de l'Institut des recherches biologiques et de le Station Biologique de l'Université de Perm. — Russ.

Bul. Mém. Soc. Anthropol., Paris.—Bulletins et Mémoires de le Société d'Anthropologie de Paris. — Fr.

Bul. Siberian Ent. Bureau, Leningrad.—Bulletin of the Siberian Entomological Bureau, Leningrad. Russ. [In Russian.]

Bul. Soc. Chem. Biol., Paris.—Bulletin de la Société de Chimie biologique, Paris. — Fr.

C.R. Trav. Lab. Carlsberg, Copenhagen.—Comptes-rendus des travaux du Laboratoire Carlsberg, Copenhague. — Denmark.

Cal. Fish & Game, Sacramento.—California Fish & Game, Sacramento. — Cal. U.S.

China Med. J., Shanghai.—China Medical Journal, Shanghai. — China.

Contr. Cushman Lab. Foramif., Sharon, Mass.—Contributions from the Cushman Laboratory for Foraminiferal Research, Sharon, Mass. — U.S.

Contr. Mus. Geol. Univ. Michigan, Ann Arbor.—Contributions from the Museum of Geology, University of Michigan, Ann Arbor. — U.S.

Contr. Nyström Inst., Taiyuanfu.—Contributions from the Nyström Institute for scientific research in Shansi, Taiyuanfu. — China.

Contr. Zool. Lab. Univ., Pennsylvania, Philadelphia.—Contributions from the Zoological Laboratory of the University of Pennsylvania, Philadelphia. — U.S.

Egatea, Porto Alegre.—Egatea, Resista da Escola de Engenharia de Porto Alegre. — Brazil.

Ent. Bul. Jamaica, Kingston.—Entomological Bulletin. Department of Agriculture, Jamaica, Kingston. — W.I.

Ent. Jahrb., Leipzig.—Entomologisches Jahrbuch, Leipzig. — Ger.

Eos, Madrid.—Eos: Revista Española de Entomologia, Madrid. — Spain.

Flugschr. D. Ges. angew. Ent., Berlin.—Flugschriften der Deutschen Gesellschaft für angewandte Entomologie, Berlin. — Ger.

Folia Ent. Hung., Budapest.—Folia Entomologica Hungarica a Societate Entomologica Hungarica, Budapest. — Hung.

Fortschr. Geol. Pal., Berlin.—Fortschritte der Geologie und Palaeontologie, Berlin. — Ger.

Geneesk. Tijds. Ned. Ind., Batavia.—Geneeskundig Tijdschrift voor Nederlandsch-Indië, Batavia. — Dutch E. Ind.

Ind. Forest Rec. Ent., Calcutta.—Indian Forest Records. (Entomology Series), Calcutta. — India.

Ind. Med. Gaz., Calcutta.—Indian Medical Gazette, Calcutta. — India.

Ind. Med. Res. Mem., Calcutta.—Indian Medical Research Memoirs, Calcutta. — India.

J. Amer. Vet. Assoc., Detroit.—Journal of the American Veterinary Medical Association, Detroit, Mich. — U.S.

J. Biophysics, Tokyo.—The Journal of Biophysics, Tokyo. — Jap.

J. Coll. Agr., Sapparo.—Journal: College of Agriculture: Hokkaido Imperial University, Sapparo. — Japan.

J. Ecology, Cambridge.—The Journal of Ecology edited for the British Ecological Society, Cambridge. — England.

J. Hygiene, London.—The Journal of Hygiene, London. — England.

J. Imp. Fish. Inst., Tokyo.—Journal of the Imperial Fisheries Institute, Tokyo. — Japan.

J. Pharm. Exper. Therap., Baltimore.—Journal of Pharmacology & Experimental Therapeutics, Baltimore. — U.S.

Knihov. Stat. Geol. Ust. Ceskoslov., Prague.—Knihovna Státního Geologickeho ustavn Ceskoslovenské Republiky, Prage (Prague). — Cechoslav.

Mém, Com. Geol., Petrograd.—Mémoire du Comité Géologique, Petrograd. — Russia.

Mem. Dept. Agr., Trinidad.—Memoirs of the Department of Agriculture, Trinidad & Tobago. [Port of Spain.] — W.I.

Mem. Geol. Surv. China, Peking.—Memoirs of the Geological Survey of China Peking. — China.

Mem. Inst. Espan. Oceanogr., Madrid.—Memoria del Instituto Español de Oceanografia, Madrid. — Spain.

Mem. Inst. Geol. Univ., Louvain.—Mémoires de l'Institut Géologique de l'Université de Louvain. — Belg.

Mém. Off. Sci. Tech. Pêches, Paris.—Mémoires. (Série Spéciale). Office Scientifique et Technique des Pêches Maritimes, Paris. — France.

Mem. Soc. Ent., Zaragoza.—Memorias de la Sociedad Entomologica de España, Zaragoza. — Spain.

Mem. Soc. Geol. Min., Bretagne, Rennes.—Mémoires de la Société Géologique et Minéralogique de Bretagne, Rennes. — France.

Mém. Soc. Geol. Nord, Lille.—Mémoires de la Société Géologique du Nord, Lille. — Fr.

Mem. Soc. Helv. Sci. Nat.—Memoires de la Societé Helvetique des Sciences Naturelles or Denkschriften der Schweizerischen naturforschenden Gesellschaft.

Mitt. Bad. Ent. Ver. Freiburg i. B.—Mitteilungen der Badischen Entomologischen Vereinigung, Freiburg i. Br. — Ger.

Monogr. Biol. Wolga. Saratov.—Monographien Biologischen Wolga-Station, Saratov. — Russia.

N. Beitr Syst. Insekt., Berlin.—Neue Beiträge zur systematischen Insektenkunde [Beilage zur "Zeits. Wiss. Insektenbiologie"], Berlin. — Ger.

Monogr. Geol. Palaeont., Berlin.—Monographien zur Geologie und Palaeontologie [4to & 8vo ser.], Berlin. — Ger.

New York State Mus. Bul., Albany.—New York State Museum Bulletin, Albany, N.Y. — U.S.

Notas Res. Inst. Esp. Ocean., Madrid.—Notas y Resúmenes, Inst. Espanol. Oceanografia, Madrid. — Spain.

Notes Mem. Off. Sci. Pêches Mar. Paris.—Notes et Mémoires, Office Scientifique et Technique des Pêches Maritimes, Paris. — Fr.

Ornis. Fenn., Helsingfors.—Ornis Fennica, Helsingfors. — Finl.

Pallasia, Dresden.—Pallasia, Dresden. — Ger.

Pan-Pacific Entomol., San Francisco.—The Pan-Pacific Entomologist, San Francisco, Cal. — U.S.

Paprs. Mich. Acad., Ann Arbor.—Papers of the Michigan Academy of Science, Arts & Letters, Ann Arbor, Mich.—Edited Ann Arbor, published New York. — U.S.

Proc. Lahore Philos. Soc.—Proceedings of the Lahore Philosophical Society, Lahore. — Ind.

Publ. Geol. Inst., Tartu.—Publications of the Geological Institution, Tartu (Dorpat). — Esthonia.

Rec. Geol. Comm. Russian Far East, Vladivostok.—Record of the Geological Committee of the Russian Far East, Vladivostok. — Siberia.

Rep. Dept. Agr., Formosa.—Reports: Department of Agriculture: Government Research Institute, Formosa. — Japan.

Rep. Lab. Mus. Comp. Path. Zool. Soc., Philadelphia.—Report of the Laboratory and Museum of Comparative Pathology of the Zoological Society of Philadelphia. — U.S.

Res. Col. Nac. V. Rocafuerte, Guayaquil.—Revista del Colegio Nacional Vicente Rocafuerte, Guayaquil. — Ecuador.

Rev. Men. Soc. Ent., Namur.—Revue Mensuelle de la Société Entomologique Namuroise, Namur. — Belg.

Rocz. Pol. Tow Geol., Krakow.—Rocznik Polskiego Towarzystwa Geologieznego w Krakowie. — Poland.

Schweiz. ent. Anz., Zurich.—Schweizer entomologischen Anzeiger, Zürich. —Switz.

Sci. Bul. Dept. Agr., Sydney.—Science Bulletin Dept. of Agriculture, Sydney. — Austr.

Tasmanian Nat., Hobart.—The Tasmanian Naturalist, Hobart. — Austr.

Trans. Carlisle N.H. Soc.—Transactions of the Carlisle Natural History Society, Carlisle. — U.K.

Trav. Lab. Ichth., Astrakhan.—Travaux du Laboratoire Ichthyologique d'Astrakhan. — Russ.

Trav. Lab. Rech. Biol. Univ., Madrid.—Traveaux du laboratoire de recherches biologiques de l'Université de Madrid. — Spain.

Trav. Mus. Geol. Min. P. le G., Leningrad.—Traveaux du Musée Géologique et Minéralogique Pierre le Grand près l'Académie des Sciences de Russie, Leningrad. — Russ.

Trav. Soc. Sci., Vilno.—Travaux de la Société des Sciences et des Lettres de Vilno. — Poland.

Vakbl. Biol., Helder.—Vakblad voor Biologen., Helder. — Hol.